DOCUMENT RESUME

ED 338 860 CE 059 556

AUTHOR Munch, Joachim
TITLE Vocational Training in the Federal Republic of Germany. Third Edition.
INSTITUTION European Centre for the Development of Vocational Training, Berlin (Germany).
REPORT NO ISBN-92-826-2502-8
PUB DATE 91
NOTE 234p.
AVAILABLE FROM UNIPUB, 4661-F Assembly Drive, Lanham, MD 20706-4391 (Catalogue No. HX-59-90-233-EN-C: $9.84).
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC10 Plus Postage.
DESCRIPTORS Adult Vocational Education; *Apprenticeships; Disabilities; Educational History; Educational Policy; Educational Practices; Federal Government; Foreign Countries; Government Role; *Job Training; Postsecondary Education; Retraining; *School Business Relationship; Secondary Education; Skill Obsolescence; *Vocational Education; Work Experience Programs
IDENTIFIERS *Germany

ABSTRACT

In the Federal Republic of Germany, the individual states have exclusive responsibility for publicly run education, which includes vocational schools. Responsibility for vocational training on the job rests exclusively with the federal government. The roots of vocational training are in medieval apprenticeship training and religious and industrial Sunday Schools. The dual system refers to training in which private firms and public vocational schools cooperate. Under the vocational training act, young persons under age 18 may be trained by firms only in recognized skilled occupations. Such training must be based on the relevant training ordinance, which lays down objectives and content. Two types of vocational schools are those that primarily impart vocational qualifications and those that primarily confer qualifying certificates. Problem groups in vocational training are handicapped youth, girls, foreigners, and people without training contracts. Adult vocational training encompasses further vocational training, retraining, reactivation, and rehabilitation. Within the framework of their labor market policy, the labor authorities initiate and finance courses of vocational preparation and the improvement of integration prospects. Issues include improvement of vocational education within the dual system and financing of on-the-job training. (Appendixes include a 136-item bibliography and list of terms.) (YLB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 388 668

CEDEFOP

Vocational training in the Federal Republic of Germany

CE 069 556

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

BEST COPY AVAILABLE

Vocational training in the Federal Republic of Germany

CEDEFOP

This study has been prepared by

Prof. Dr Joachim Münch

Chair of pedagogics, in particular vocational and labour pedagogics, University of Kaiserslautern

for
CEDEFOP – European Centre for the Development of Vocational Training, Berlin 1982

Third edition 1991

Published by:
CEDEFOP – European Centre for the Development of Vocational Training,
Jean Monnet House, Bundesallee 22, **D-1000 Berlin 15;**
Tel.: (030) 88 41 20; Telefax: (030) 88 41 22 22; Telex: 184 163 eucen d

The Centre was established by Regulation (EEC) No 337/75 of the Council of the European Communities

Cataloguing data can be found at the end of this publication

Luxembourg: Office for Official Publications of the European Communities, 1991
Third edition 1991

ISBN 92-826-2502-8

Catalogue number: HX-59-90-233-EN-C

Reproduction is authorized, except for commercial purposes, provided the source is acknowledged

Printed in Belgium

Introduction

Dear Reader,

Cooperation amongst the Member States of the European Community in the field of vocational training can be encouraged best of all by contributing to an understanding of the vocational training systems. CEDEFOP has invested a substantial part of its resources in improving the exchange of information, not only through the publication of descriptive monographs, but also through the organization of seminars and conferences, the production of tapes and videos and the publication of a collection of studies and documentations.

This monograph aims to provide the reader with as comprehensive a view as possible of all elements making up the vocational training system – legislation, regulations for financing, historical development, etc. Our purpose is to provide you with a "dynamic" description of the problems – economic, social and cultural – with which vocational training is faced in every country.

The monograph also serves as a foundation for a whole series of activities of CEDEFOP, e.g. the work on the comparability of vocational training qualifications, or for detailed studies on certain significant aspects of the development of initial and continuing vocational training.

In an effort to present an objective picture, we have discussed the content of this description with the Social Partners. We would claim to have taken into consideration the opinions of all concerned, i.e. the representatives of the Member States, the employers and employees.

Our description of the vocational training systems of all the Member States of the European Community are modelled around a standard structure. This enables us, wherever possible, to draw a comparison amongst the various elements of each individual system.

All the descriptions have been published in the original language and in at least two other Community languages; the present study has so far been published in Danish, Dutch, English, French, German and Italian.

The Centre wishes to thank the author, Prof. Dr. Münch, for this valuable contribution.

Ernst Piehl
Director

C. Politi
Deputy Director

J.M. Adams
Project Coordinator

CONTENTS

Foreword 9

1. STRUCTURAL FEATURES OF THE FEDERAL REPUBLIC OF GERMANY 11

1.1 The structure of the state 11

1.2 Population and demographic evolution 12

1.3 Socio-economic framework data 18

1.4 The education system 22

1.4.1 Structural features of the education system 22

1.4.2 The general-education schools 23

1.4.3 Vocational education and training (an overview) 25

1.4.4 The universities (an overview) 26

2. THE HISTORY OF VOCATIONAL TRAINING 29

2.1 Introduction 29

2.2 The history of apprenticeship training 29

2.3 The history of legal regulation of apprenticeship training 30

2.4 The history of the training workshops 33

2.5 The history of regulatory instruments for on-the-job vocational training 34

2.6 The history of the vocational schools 35

2.7 The history of the dual system 37

3. THE DUAL SYSTEM OF VOCATIONAL TRAINING 40

3.1 Structural features and importance of the dual system 40

3.2 Legal aspects of the dual system 45

3.2.1 The legal foundations of on-the-job vocational training 45

3.2.1.1 The responsibility of the Federal Government for on-the-job training 45

3.2.1.2 The Vocational Training Act and other laws 46

3.2.1.3 The vocational training contract 48

3.2.2 The legal foundations for vocational training in the (part-time) vocational school (Berufsschule) 49

3.2.3 The legal-administrative structure of the dual system 50

3.2.3.1 An overview of the legal-administrative structure 50

3.2.3.2 The competent bodies 51

3.2.3.2.1 Types and responsibilities 51

3.2.3.2.2 Tasks 52

3.2.3.2.3 Organization and personnel 53

3.2.3.3 The Vocational Training Committees of the competent bodies 53

3.2.3.3.1 Organization and composition 53

3.2.3.3.2 Tasks 53

3.2.3.4 The Land Committees for Vocational Training 54

3.2.3.4.1 Organization and composition 54

3.2.3.4.2 Tasks 55

3.2.3.5 The competent Länder Ministries 55

3.2.3.6 The competent Federal Ministries 56

3.2.3.7 The Federal Institute for Vocational Training (Das Bundesinstitut für Berufsbildung – BIBB) 57

3.2.3.7.1 Organization 57

3.2.3.7.2 Tasks 58

3.2.3.8 The Federal Institute of Labour (Die Bundesanstalt für Arbeit) 59

3.2.3.8.1 Organization 59

3.2.3.8.2 Tasks 59

3.2.4 Cooperation between employers and workers in the dual system 60

3.2.4.1 Introduction 60

3.2.4.2 Cooperation within the firm 60

3.2.4.3 Cooperation in the Committees for Vocational Training 61

3.2.4.4 Cooperation with the competent bodies 61

3.2.4.5 Cooperation in the examining boards 62

3.2.4.6 Cooperation in the Federal Institute for Vocational Training 62

3.2.4.7 Cooperation in the Federal Institute of Labour 62

3.3 The dual system from the vocational pedagogic aspect 63

3.3.1 The firm and the Berufsschule as cooperative providers of learning venues 63

3.3.2 The in-firm learning venues 67

3.3.2.1 The workplace as a learning venue 67

3.3.2.2 The in-firm training workshop as a learning venue 68

3.3.2.3 In-firm instruction as a learning venue 71

3.3.2.4 Variants of in-firm combinations of learning venues 73

3.3.2.5 The influence of in-firm learning venue combinations on the training results 74

3.3.3 The group training workshop as a learning venue 74

3.3.4 The learning venues of the Berufsschule 77

3.3.4.1 Berufsschule instruction as a learning venue 77

3.3.4.2 The Berufsschule workshop as a learning venue 77

3.4 Prerequisites for the employment and in-firm training of apprentices 79

3.4.1 Technical prerequisites 79

3.4.1.1 Technical prerequisites for industrial and commercial undertakings 79

3.4.1.2 Technical prerequisites for craft establishments 79

3.4.2 Prerequisites regarding personnel for the employment and training of apprentices 80

3.4.2.1	Prerequisites in industrial and commercial undertakings	80
3.4.2.2	Prerequisites for personnel in craft establishments	82
3.4.3	Special regulations	82
3.4.3.1	Special regulations in the liberal professions	82
3.4.3.2	Special regulations in the public service	83
3.5	Objectives and contents of vocational training within the framework of the dual system	84
3.5.1	Objectives and contents of vocational training within the firm	84
3.5.1.1	The Training Ordinances as didactic outline regulations	84
3.5.1.1.1	Legal basis and competencies	84
3.5.1.1.2	Structure and content of the Training Ordinances	84
3.5.1.1.3	Numerical development of Training Ordinances	86
3.5.1.1.4	Types of Training Ordinances	89
3.5.1.1.5	Initiatives and criteria for the development of Training Ordinances	93
3.5.2	Objectives and contents of vocational training in the Berufsschule	94
3.5.2.1	The tasks of the Berufsschule	94
3.5.2.2	The curricula of the Berufsschule	95
3.5.3	Harmonization of Berufsschule curricula and Training Ordinances	96
3.6	The examination system in the dual system	99
3.6.1	The intermediate examination	99
3.6.2	The final examination	99
3.6.2.1	Legal bases and competencies	99
3.6.2.2	Examination regulations	100
3.6.2.3	Examining boards	100
3.6.2.4	Admission to the final examination	101
3.6.2.5	Examination requirements	101

3.6.2.6	Involvement of the Berufsschule	102
3.6.3	The master craftsman's examination	102
3.6.4	The further training examination	104
3.7	Supervision and control in the dual system	105
3.7.1	Supervision by the competent bodies	105
3.7.2	Supervision by the state Trade Supervisory Offices	107
3.7.3	Supervision of the Berufsschulen	108
3.8	Initiatives for reform within the dual system	108
3.8.1	The Basic Vocational Training Year	108
3.8.1.1	Basic vocational training and occupational fields	108
3.8.1.2	Organizational variants of the Basic Vocational Training Year	110
3.8.1.3	Objectives of the Basic Vocational Training Year	110
3.8.1.4	The problem of countability	111
3.8.1.5	Development trends	112
3.8.1.6	Special forms of the Basic Vocational Training Year	114
3.8.2	The block system	115
3.8.3	Graduated training	117
4.	THE VOCATIONAL SCHOOLS	121
4.1	Introduction	121
4.2	Vocational schools which primarily impart vocational qualifications	121
4.2.1	Berufsfachschulen	121
4.2.2	Fachschulen	124
4.3	Vocational schools which primarily confer qualifying (entrance) certificates	127
4.3.1	Berufsaufbauschulen	127
4.3.2	Fachoberschulen	129

4.3.3	Berufliche Gymnasien	132
4.4	The vocational educational path	133
5.	PROBLEM GROUPS OF VOCATIONAL TRAINING	137
5.1	Vocational training of young handicapped persons	137
5.1.1	Definitions	137
5.1.2	The vocational training of handicapped persons in accordance with Articles 44, 48 of the Vocational Training Act and Articles 41, 42b of the Crafts Code	138
5.1.3	Vocational training in Berufsbildungswerke	138
5.1.4	Vocational training in workshops for the disabled	139
5.2	The vocational training of girls	140
5.2.1	Vocational disadvantages suffered by girls	140
5.2.2	Improving training opportunities for girls	141
5.3	The vocational training of young foreigners	142
5.3.1	Causes and extent of the problem	142
5.3.2	Objectives and measures	143
5.4	Young people without training contracts	145
5.4.1	Size of the problem group and reasons for lack of training	145
5.4.2	Initiatives for a solution	147
6.	ADULT VOCATIONAL TRAINING	151
6.1	Concept and forms of adult vocational training	151
6.2	Further vocational training	152
6.2.1	Further vocational training in accordance with the Vocational Training Act	152
6.2.2	Further vocational training outside the regulations of the Vocational Training Act	156
6.2.3	Further vocational training in accordance with the school laws of the Länder, in Fachschulen	157

6.2.4 Further vocational training in accordance with the adult (further) education/ training laws of the Länder 157

6.3 Vocational retraining 157

6.4 Vocational reactivation 161

6.5 Vocational rehabilitation 161

6.6 The role of the Employment Promotion Act (Arbeitsförderungsgesetz) in adult vocational training 162

7. SPECIAL FORMS OF VOCATIONAL TRAINING 165

7.1 Dual-qualification training courses 165

7.2 Vocational distance learning 167

7.3 Special training courses in industry, commerce and the crafts for holders of the university entrance certificate (Abiturienten) 169

7.4 Trainee programmes in industry and commerce 173

8. VOCATIONAL PREPARATION AND INTEGRATION MEASURES FINANCED BY THE LABOUR AUTHORITIES 177

8.1 Survey of the measures 177

8.2 Basic training courses 178

8.3 Promotion courses 178

8.4 Training courses to improve integration prospects 179

8.5 Measures for the vocational preparation and social integration of young migrants 179

9. VOCATIONAL TRAINING RESEARCH AND FINANCING OF VOCATIONAL TRAINING 183

9.1 Vocational training research 183

9.2 Financing of vocational training 185

9.2.1 Financing of vocational training in firms 185

9.2.2 Financing of vocational training in group training workshops/centres 186

9.2.3 Financing of vocational training in schools 186

9.2.4 Financing of the various organs concerned with vocational training 187

10. PROBLEMS AND TRENDS 189

INDEX OF TABLES 195

INDEX OF DIAGRAMS 197

BIBLIOGRAPHY (SELECTION) 199

LIST OF TERMS 209

DOCUMENTATION 212

Foreword

This description of the vocational training system of the Federal Republic of Germany has been prepared at the request of the European Centre for the Development of Vocational Training, Berlin. The main objective was to present, in a compact form, an authentic picture of the framework conditions, aims, paths and organizational structures of vocational training in the Federal Republic which would also be understandable to foreigners.

This picture, depicting the complexity of the vocational training system which has grown up over the years in the Federal Republic of Germany had to be drawn in a way that combined accuracy of content with clarity. Thus the aim could not be completeness of detail; the author had to concentrate on basic features, structures and problems. Such an approach, however, necessitated an assessment of the relative importance of various features of this overall picture. For example, the fact that the dual system, as part of vocational training, takes up a particularly large amount of space can be justified by the fact that this system is multifaceted and, in comparison with all the other countries of the European Community – indeed the rest of the world – is of particular importance in the Federal Republic of Germany.

A system of education and training, and this is especially true of vocational training, emerges and grows within the historical process and is the result – pronounced or not – of political decisions made on the basis of certain norms, values and ideologies. But this also means that there is not, and cannot be, general agreement on the advantages and disadvantages, suitability or unsuitability of various forms of vocational training. Quite understandably, the interests and opinions of employers differ to some extent from those of workers. Nor is the author, as an expert in this field, free of evaluations and assessments which can influence the routes and objectives of an exploratory journey through the vocational training system of the Federal Republic of Germany and the nature of the resultant report.

The author has, however, endeavored to let the facts speak for themselves as far as possible; differences of opinion between political parties, or between employers and workers with regard to certain constructions and developments in vocational training are revealed, in order to avoid excessive glossing and harmonization of the picture and, at the same time, enable the reader to gain a better understanding of the problems.

The multifarious phenomena and aspects of vocational training in the Federal Republic already mentioned call for a certain degree of redundancy of information in order that the reader may more clearly understand the often complicated facts and relationships. For example, the various vocational training committees of the dual system are dealt with separately several times according to the categories organization, financing and cooperation. Text-related material in the annex is intended to increase the informative value of this description without impairing the clarity and readability aimed at. Other orientation aids are the section-related bibliography, the index and the explanations of terms which, if defined in the text, would detract from its clarity, but which may be unfamiliar.

Since the coming into force of the Vocational Training Act (Berufsbildungsgesetz) in 1969, apprentices (Lehrlinge) have been officially known as 'trainees' (Auszubildende) but in everyday

language the traditional terms 'apprentice', 'apprenticeship training', etc., remain. For this reason, and especially on linguistic grounds, they are also used in this report. Valuable technical assistance was given by Sigrid Münster and Walter Schreiber, scientific assistants, and by Christine Kohl.

Joachim Münch

1. STRUCTURAL FEATURES OF THE FEDERAL REPUBLIC OF GERMANY

1.1 The structure of the state

Pursuant to its constitution, the Basic Law of 23 May 1949, the Federal Republic of Germany is a federal, democratic, constitutionally governed, parliamentary and social state. As a Federal state it comprises eleven Federal Länder: Baden-Württemberg, Bavaria, Bremen, Hamburg, Hessen, Lower Saxony, North Rhine-Westphalia, Rhineland Palatinate, the Saarland, Schleswig-Holstein and Berlin (West).[1] Three of these are city-states Berlin(West), Bremen and Hamburg). The national territory of the Federal Republic covers 248 652 square kilometer. The population, including foreigners, numbers 61 024 000 (1985). The Federal Länder vary considerably in area and the number of inhabitants; taking the latter as a yardstick, the largest Federal Land is North Rhine-Westphalia (16 686 000) and the smallest Bremen (663 000).

The legislative organs are the Bundestag (representation of the people) and the Bundesrat (representation of the Länder). In addition, each Land has its own parliament (Landtag) as a legislative organ.

The tasks of government are divided between the Federal Government and the Länder. Their implementation is a matter for the Länder, in so far as the Basic Law neither lays down nor permits any other regulation (Article 30). For the most part, however, the activities of the Länder are essentially the implementation of Federal Laws. A very important exception is the exclusive responsibility of the Länder for *publicly-run education*, which includes the vocational schools. Thus all *school laws* are, in accordance with the 'cultural autonomy' of the Länder, *Länder laws*. Responsibility for vocational training *on-the-job*, on the other hand, rests exclusively with the *Federal Government*. The most important law regulating training *on the job*, the Vocational Training Act of 14 August 1969, is a *Federal law*.

1 Under the Basic Law (Art. 23) Berlin (West) (literally: 'Greater Berlin') is part of Federal Territory; its integration, however, is temporarily suspended through reservations contained in the occupation laws.

1.2 Population and demographic evolution

In 1979, for the first time, population development showed a downward trend, as the following tables indicate:

Tab. 1 Demographic evolution[2]

1975	61 820 000	1975	249
1979	61 360 000	1979	247
1980	61 570 000	1980	248
1981	61 680 000	1981	248
1982	61 638 000	1982	248
1983	61 423 000	1983	247
1984	61 175 000	1984	246
1985	61 024 000	1985	245

population density (per km)ftl

A noticeable feature, too, is that there are far more women than men (2.68 million) in the Federal Republic.

Tab. 2[3] Resident population in 1985 according to sex (in millions)

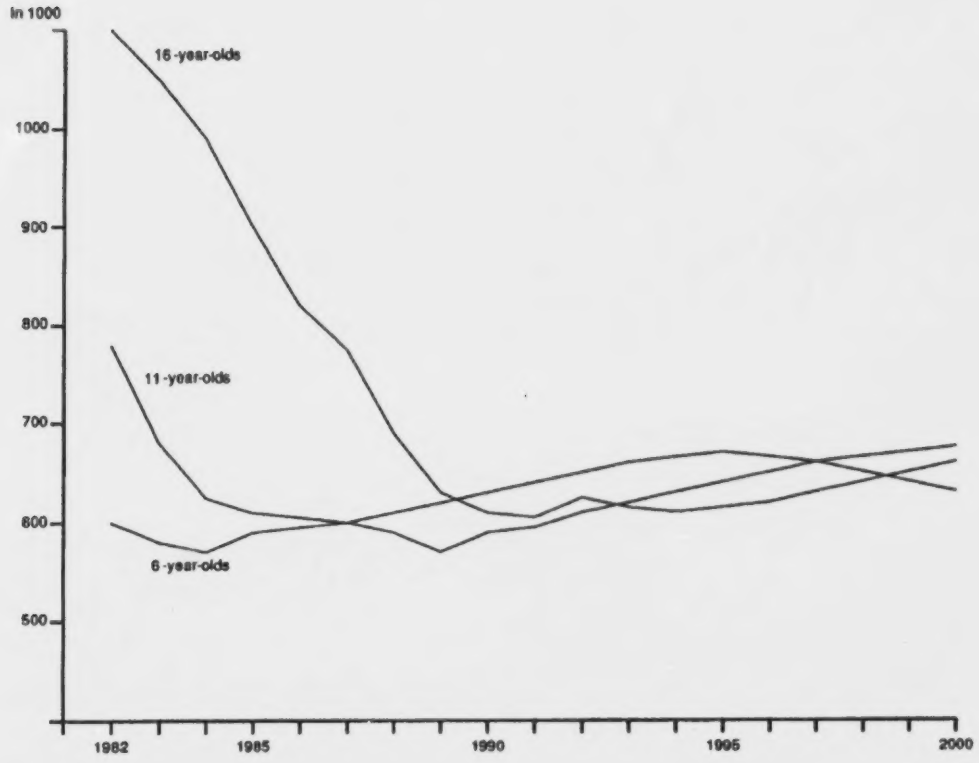
Total resident population	61.02
females	31.83
males	29.19

It is expected that the resident population of the Federal Republic of Germany will (despite the slight increase in 1981 and 1982) continue to decline, as the birth rate figures and projections show.

2 Unless otherwise stated, these and the following figures are taken from the Statistical Year Book 1986. (Pub: Federal Statistical Office, Wiesbaden/Stuttgart/Mainz 1983).

3 From: Basic and Structural Data 1986/87, p. 259.

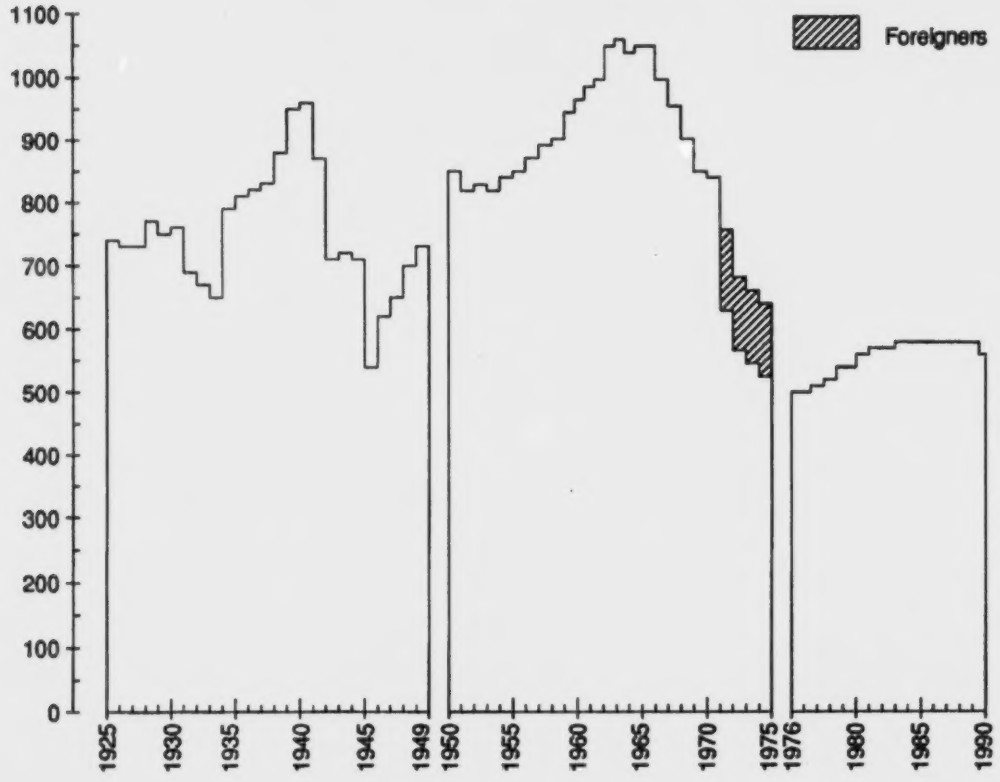
Fig. 1 Projection of 6-, 11-, and 16-year-olds, 1982 to 2000



(Source: Federal Minister for Education and Science: Basic and structural data, 1983/84, p. 230 et seq.)

The projection of 6-, 11-, and 16-year-olds provides important information concerning the numbers of schoolchildren in the future and the demand for education.

Fig. 2 Birth figures, 1925–1990



Apart from educational policies and objectives which could lead to changes in the numerical significance of various educational paths, it is doubtful whether there will be a linear decrease in the overall number of schoolchildren. In particular, we cannot exclude the 'suction effect of 'higher value' educational paths (e.g. the **Gymnasium**) upon the **Hauptschule** and on vocational training within the dual system, and thus on the **Berufsschule** as well. An education policy which safeguarded the interests of both the individual and the entire national economy would probably present no less a problem against the background of excessive capacity in the education and training system than the shortage of places resulting from the years of high birth rates, a shortage that will persist in the universities into the second half of the 1980s. The following tables show the anticipated figures in respect of schoolchildren up to and including 1995 (general-education schools).

Tab. 3 Pupils at general-education schools according to educational level and type of school, in thousands[4]
Projection made by the Standing Conference of the Ministers of Culture (**Kultusministerkonferenz = KMK**) (Documentation 91)

Year	Total No of pupils	including Primary level Grundschulen	Secondary Level I Haupt-schulen	Real-schulen	Gymnasien	Secondary Level II	Special schools	Comprehen-sive schools Gesamt-schule	Kollegs
1986	6 986.6	2 308.7	1 528.7	973.4	1 013.3	638.0	267.6	212.9	44.0
1988	6 643.3	2 380.9	1 422.5	868.9	911.3	546.3	267.5	212.3	43.6
1991	6 559.6	2 465.8	1 420.2	839.5	891.2	425.5	259.9	215.0	42.5
1993	6 671.0	2 523.6	1 453.0	855.2	909.7	401.6	265.5	220.6	41.8
1996	6 882.8	2 595.1	1 503.7	894.4	947.4	399.4	274.6	227.3	40.9

Tab. 4 Pupils at vocational schools according to educational level and type of school, in thousands[5]
Projection made by the Standing Conference of the Ministers of Culture (Documentation 91)

Year	Pupils at vocational schools Total No	including Secondary Level II Berufsschulen*)	Berufsgrund-bildungsjahr	Berufsaufbau-schulen Total	including part-time	Berufsfach-schulen	Fachoberschulen Total	including part-time	Fachschulen Total	including part-time
1986	2 599.7	1 708.8	159.6	14.2	1.9	381.8	139.0	23.8	196.3	12.8
1988	2 289.5	1 480.3	153.7	12.9	1.8	329.8	119.2	20.5	193.6	12.6
1991	1 875.2	1 158.6	155.9	11.1	1.4	271.1	95.5	16.0	183.0	11.7
1993	1 770.0	1 068.8	165.3	10.4	1.4	259.3	90.0	15.1	176.2	11.4
1996	1 751.0	1 048.4	177.4	10.1	1.3	259.5	88.1	15.1	167.5	11.0

*) Including vocational special schools

A very large number of foreigners live and work in the Federal Republic of Germany. They represent an important source of labour, mainly for jobs requiring only minimal vocational qualifications. Among migrants the young, in particular, present a grave and growing problem as far as education and vocational training are concerned. On the one hand, without adequate education and training their social and occupational prospects are poor in the Federal Republic, but on

4 From: Basic and Structural Data 1986/87, p. 26.

5 From: Basic and Structural Data 1986/87, p. 27.

the other hand, because of the drastic decline in the birth rate of the native population, the Federal Republic will urgently need to utilize the reservoir of skills which the foreign sections of the population have to offer. The following table shows the numbers of foreigners in the Federal Republic of Germany.

Tab. 5 Foreigners in Germany (in thousands)

	1980	1981	1982	1983	1984	1985
Total	4 453.3	4 629.7	4 666.9	4 534.9	4 363.6	4 378.9
including						
Turks	1 462.4	1 546.3	1 580.7	1 552.3	1 425.8	1 401.9
Yugoslavs	631.8	637.3	631.7	612.8	600.3	591.0
Italians	617.9	624.5	601.6	565.0	545.1	531.3
Greeks	297.5	299.3	300.8	292.3	287.1	280.6
Spaniards	180.0	177.0	173.5	166.0	158.8	152.8
Austrians	172.6	176.3	175.0	171.6	172.1	172.5
Portuguese	112.3	109.4	106.0	99.5	83.0	77.0
Dutch	107.8	108.7	109.0	108.6	108.6	108.4

It can be seen that the Turks are by far the largest group; as far as children and young people are concerned they, together with the Greeks, present a particularly difficult problem when it comes to educational and vocational integration. They are, for instance, quite different from the Italians, where the small cultural gap between the country of origin and the host country facilitates integration. Not all the male migrant workers bring their families to the Federal Republic and this results in a distinct preponderance of male over female foreign workers.

Tab. 6 Foreigners according to sex, 1985

	in thousands	in %
males	2 504.9	57.2
females	1 874.1	42.8

The following table shows that considerable changes are taking place in the structure of the migrant population and that the proportion of children and young people among the foreign resident population will continue to increase very rapidly. In 1978 it was already 31.8% (foreign children and young people under 21). Unless drastic changes occur, just under half the youngsters without a training contract in Germany in the 1980s will be foreign nationals!

Tab. 7 Foreigners according to age group, 1985

Aged from ... to ... years	in thousands	in %
Under 6	321.2	7.3
6 to 10	255.0	5.8
10 to 15	366.0	8.4
15 to 18	213.1	4.9
18 to 21	221.4	5.1
21 to 35	1 172.0	26.8
35 to 45	930.3	21.2
45 to 55	567.0	12.9
55 to 65	221.4	5.1
65 and over	111.6	2.5

Finally, the dimensions which the educational and political problems associated with the foreigners assume will also depend on the length of their stay.

Tab. 8 Migrants according to duration of stay, 1985

Remained for ... years	in thousands	in %
Under 1	210.1	4.8
1 to 4	423.8	9.9
4 to 6	449.0	10.3
6 to 8	398.9	9.1
8 to 10	311.0	7.1
10 to 15	1 143.6	26.1
15 to 20	909.1	20.8
20 and over	524.5	12.0

Thus in 1985, approximately 2.9 million foreigners had been in the Federal Republic of Germany for over eight years.

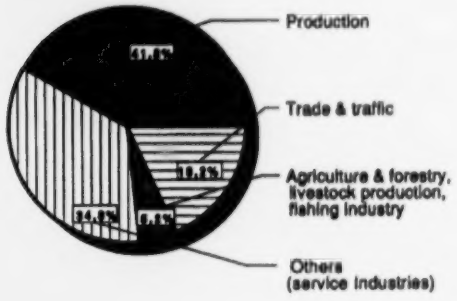
1.3 Socio-economic framework data

The Federal Republic of Germany is a highly-developed industrial country which, because of a relative shortage of domestic raw materials, is to a large extent dependent upon exports to ensure its economic standing. With a gross national product of DM 1 800 thousand million, the Federal Republic exported goods to the value of DM 537 thousand million (about 29%) in 1985.

It can be seen from the following figures that only a very small percentage of the gainfully active population is still employed in agriculture, forestry and the fishing industry, and also that the vast majority of workers are wage and salary earners.

Fig. 3

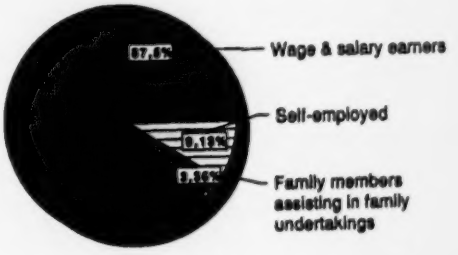
Gainfully active population by economic sector 1984, in %



in absolute figures, 1984 (thousands)	
Production	11 130
Trade & traffic	4 840
Agriculture & forestry, livestock production, fishing industry	1 376
Others (service Industries)	9 262
Total	26 608

Fig. 4

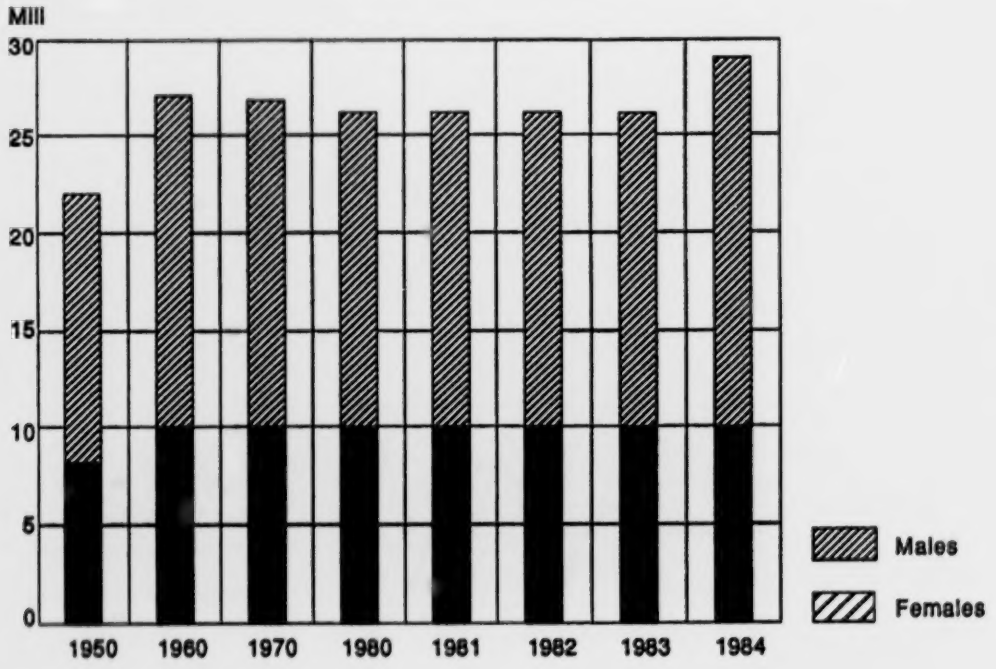
Gainfully active population by occupational status 1984, in %



in absolute figures, June 1984 (thousands)	
Wage & salary earners	23 282
Self-employed	2 430
Family members assisting in family undertakings	896
Total	26 608

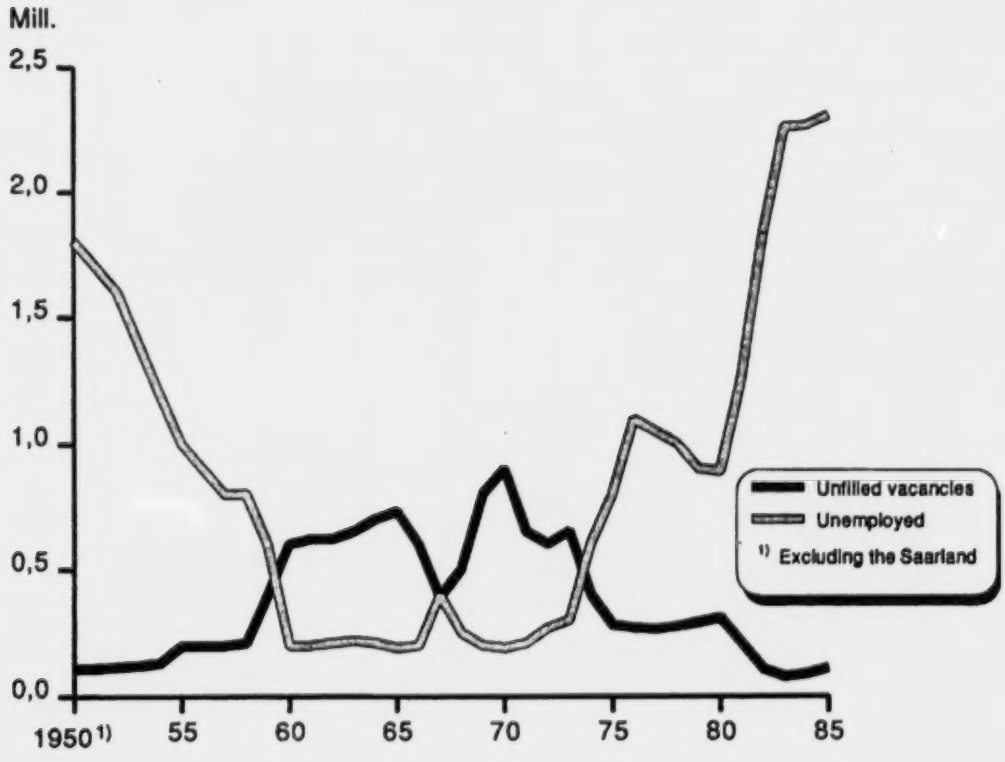
While, since 1950, there have been marked shifts among the gainfully active population as regards both the economic sector in which they are employed and their occupational position, the absolute total has, up to recent years, remained relatively constant. This is also true of the proportion of males to females. Only since 1984 has the total number of gainfully employed risen considerably.

Fig. 5 Gainfully active persons



Germany had virtually full employment from the early 1960s until the early 1970s (with brief interruptions), but since the mid-1970s unemployment has become a *serious labour market and social problem* in the Federal Republic too.

Fig. 6 Unemployed persons and unfilled vacancies



	Unemployed	Unfilled vacancies
1980	888 900	308 348
1981	1 271 574	207 928
1982	1 833 244	104 871
1982	2 258 235	75 797
1983	2 265 559	87 929
1985	2 304 014	109 996

Whereas unemployment among the older generation is mainly a labour market problem, youth unemployment is also, and primarily, an educational and training problem, for those most affected by it are the young people who have gained neither a school-leaving certificate nor a vocational qualification. The following tables show the extent, development and structure of youth unemployment.

Tab. 9 Youth unemployment (under 25 years of age) (in each case as of end of September)[6]

Year	Total	% (of the unemployed)	No. of males	%	No. of females	%
1981	375 010	29.8	--	--[7]	--	--)
1982	551 146	30.3	--	--[7]	--	--)
1983	623 334	29.2	304 382	48.8	318 952	51.2
1984	582 380	27.2	280 806	48.2	301 574	51.8
1985	563 545	26.2	262 652	46.6	300 893	53.4

Tab. 10 Youth unemployment (20–25 years)

Year	Total	% (of the unemployed)	No. of males	%	No. of females	%
1977	161 873	17.8	66 772	41.2	95 101	58.8
1978	153 931	17.8	60 073	39.0	93 858	61.0
1979	123 709	16.8	44 722	36.15	78 987	63.85
1980	143 526	17.4	57 340	39.95	86 196	60.05
1981	356 298	19.1	110 026	45.9	129 613	54.1
1982*)	239 639	19.6	183 512	51.5	172 786	48.5

*) End of September

Unemployment has also increased among graduates recently.

Tab. 11 Unemployment among graduates

Year	Total	%	No. of males	%	No. of females	%
1977	23 777	2.6	15 685	66.0	8 092	34.0
1978	22 420	2.6	13 586	66.6	8 834	39.4
1979	24 051	3.3	13 894	57.8	10 157	42.2
1980	28 263	3.4	15 585	55.1	12 678	44.9
1981	40 867	3.3	21 866	53.4	19 061	46.6
1982	54 494	3.0	29 918	54.9	24 576	45.1

6 From: Basic and Structural Data 1982/83, p. 240.
From: Basic and Structural Data 1983/84, p. 252.
From: Basic and Structural Data 1985/86, p. 260.
From: Basic and Structural Data 1987/87, p. 280.

7 For 1981/82 no figures were quoted for male/female population

The extent of unemployment does, however, vary considerably in the academic occupations. Whereas the needs of the economy in various engineering occupations cannot be met, there is a marked surplus of teachers in various fields. It is also worth noting that even when unemployment rates are relatively high (1982: 7.3%) we find a shortage of skilled workers in various firms and branches of the economy. This applies particularly to certain crafts, the catering trade, the construction industry, and also to certain occupations in the metal industry.

1.4 The education system

1.4.1 Structural features of the education system

- In the Federal Republic of Germany the vast majority of the schools, whether general-education or vocational, are *state schools*. Private schools are covered by special Länder laws which regulate approval, state recognition and financial promotion, and these schools are few in number. Of all the pupils attending general-education schools in 1985, 5.6% were at private schools. Universities are almost exclusively state institutions.

- Schools in the Federal Republic are, as a rule, *half-day*[8] *schools*, all-day schools being very rare.

- Pursuant to Articles 7 and 141 of the Basic Law, *religious instruction* is compulsory in all schools.

- In most of the Federal Länder the *statutory period of education is nine years*, but in Berlin, North Rhine-Westphalia and Bremen compulsory education lasts ten years. In addition, all young people who do not proceed to another school (e.g. a **Gymnasium**) after completing this statutory period are required to attend a *part-time vocational school* (**Berufsschule**), usually for three years. This applies in all the Länder.

- In each Land there is a more or less distinct *departmental and administrative division* between general-education and vocational schools.

- General-education schools are organized in a vertical pattern. From a common base of four to six years at primary school (**Grundschule**), three types of school branch out which are independent of each other with regard to aims, curricula and duration: the five- (or six-) year **Hauptschule**, the six-year **Realschule**, and the nine-year Gymnasium. There are also **Gesamtschulen**, but they still form only a small proportion of the secondary schools)[9]. Out of a total of 3 731.6 thousand Secondary Level I pupils in 1985, only 217.5 thousand were attending comprehensive schools (5.8%).

- Under the Basic Law, responsibility for *schools*, both general-education and vocational, rests with the Länder (Articles 30 and 70, "cultural autonomy" of the *Länder*).

---

8 The number of hours varies, but classes are over by 2 p.m.

9 Cf. Tab.12, p.24

- The system of *apprenticeship training* 'dual system') occupies a **very important position** in the Federal Republic of Germany. In 1980, about two thirds of the young people leaving school embarked on training within the dual system; with about 420 recognized skilled occupations this covers all sectors of the economy.

- Responsibility for *vocational training outside the schools*, and in particular within firms, rests with the *Federal Government*.

- The *pre-school field* is either very loosely linked to the state education system or not at all; here the main responsibility is shouldered by the *voluntary welfare organizations* (**Kindergarten, Schulkindergarten, Vorschule**).

- *No fees* are payable at schools in the Federal Republic and this also applies to secondary schools and universities. It does not apply to certain private schools.

- Where needed, pupils at secondary and vocational schools and students at tertiary level receive a *training grant*.

- The conditions for awarding training grants and the amounts granted are regulated in the Federal Training Promotion Act (**Bundesausbildungsförderungsgesetz**) of 26 August 1971.

- Irrespective of need, apprentices receive *training remuneration* based on collective wage agreements; thus the sums paid vary considerably according to occupation, collective-agreement area, and the wage agreement concerned.

- There are *special schools* for those with learning difficulties, the mentally handicapped, the physically handicapped, the blind and those with partial vision, the deaf and those with partial hearing, and those with speech difficulties or behavioural disturbances.

1.4.2 The general-education schools

As already mentioned under section 1.4.1, general education in the Federal Republic of Germany is characterized by a primary stage (Grundschule), which is common to all pupils, followed by a secondary level which builds on the primary stage and branches out vertically into the three forms of secondary school (Hauptschule, Realschule, Gymnasium). While the Hauptschule (fifth to ninth – or tenth – school year), the Realschule (fifth to tenth school year) and the lower level of the Gymnasium (fifth to tenth school year) are assigned to *Secondary Level I*, the upper level of the Gymnasium (eleventh to thirteenth school year) comes within *Secondary Level II*. Thus the general – education system encompasses *forms of school* which differ considerably in their requirements and objectives, and three *school levels* (Primary, Secondary Level I and Secondary Level II).[10]

10 Cf. Fig. 7, p. 28.

Quite a number of those concerned with educational policy are critical of the fact that a child's educational path is determined after just four years at primary school, that is to say at the age of ten years. In 1959 the German Committee for Education (**Deutscher Ausschuss für das Erziehungs- und Bildungswesen** [1953 to 1965]) had proposed the introduction of a uniform stage for all children in their fifth and sixth years at school ('promotion stage'). With the same objectives, that is postponement of the choice of educational path and better promotion of the various talents, the Federal Government/Länder Commission for Educational Planning (**Bund-Länder-Kommission für Bildungsplanung**) decided, in 1973, to try out for this same age group a comprehensive *orientation stage* and to prepare for its introduction nationwide from 1976 onwards. In accordance with an agreement reached by the Standing Conference of the Ministers of Culture in 1974, two organizational forms of the orientation stage were approved: one *independent* of the form of school and the other *dependent* upon it, that is to say linked to the Hauptschule, the Realschule or the Gymnasium. Since then things have developed very differently in the various Länder, both with regard to preference for one or other organizational form and to quantitative progress. In several Länder the orientation stage is still numerically insignificant, while in others it is attended by nearly 100% of the pupils in their fifth and sixth years at school.

Over the last fifteen years there has been a change in the numbers of pupils at the various secondary schools (Hauptschule, Realschule, Gymnasium), with a substantial shift to the Realschule and the Gymnasium. As a result, the relative importance of the Hauptschule has diminished and now it is occasionally dubbed a 'Remainder school'.

Tab. 12 Proportion of Hauptschule pupils in selected years[11]

Year	Secondary Level I (Pupils in thousands)			
	Hauptschule	Realschule	Gymnasium	Gesamtschule
1975	2 512.8	1 179.9	1 354,8	165.8
1979	2 361.4	1 365.2	1 522,7	214.4
1980	2 226.5	1 351.1	1 543,8	220.6
1982	2 063.4	1 278.1	1 378,3	226.3
1983	1 894.9	1 214.4	1 289,1	224.7
1984	1 714.4	1 132.2	1 193,4	220.9
1985	1 572.4	1 049.0	1 110,2	217.5

As far as the number of pupils is concerned, the **Gesamtschule**, in which the Hauptschule, the Realschule and the Gymnasium are merged, occupies only a minor role. Of the 5 618.2 thousand pupils in Secondary Level I in 1982, only 226.3 thousand were attending Gesamtschulen, i.e. 4.0 %.

In conformity with the relatively strict separation of general-education and vocational schools, which is in itself an expression of the German educational tradition, there are no subjects relat-

11 From: Basic and Structural Data 1986/87, p. 26.

ing to the world of work and occupations in the curricula of the Gymnasium and the Realschule, and even in the Hauptschule they are very limited. According to the original conception (Recommendation of the German Committee for Education for the expansion of the Hauptschule, 1964) a discipline to be known as **Arbeitslehre** (introduction to working life) was to give the Hauptschule its special profile but even now this has not, basically, been realized; however, there are marked differences between the various Länder with regard to the nature and scope of this subject. Overall, the general-education system in the Federal Republic of Germany is characterized by great diversity and differentiation, but also by complexity and a lack of lateral mobility. A trend towards uniform reformative measures for the entire Federal Republic does not exist. While the Länder governed by the Christian Democratic Union (including the Christian Socialist Union in Bavaria) adhere to the vertical pattern of general education, those Länder controlled by a Socialist-Liberal coalition are more in favour of changing to a comprehensive school system.

1.4.3 Vocational education and training (an overview)

When we speak of vocational training in the Federal Republic of Germany we mean all public and private providers of training measures which aim indirectly and directly at vocational qualification. Although the universities also provide vocational training, in the language of education and vocational pedagogics they are not included when we talk of the vocational training system. On the other hand, this does encompass not only the (publicly-run and private) vocational schools (**Berufsschulen, Berufsfachschulen, Fachschulen, Berufsaufbauschulen, Fachoberschulen, Fachgymnasien/berufliche Gymnasien**) but also the training *firms*, group training workshops, retraining centres, rehabilitation centres, the Chambers, industrial associations, trade unions and so on as providers of multifarious measures for vocational qualification.

Vocational training covers both *young people* and *adults*.

The tasks arising in the training of *young people* include:

- *Occupational orientation and preparation* in the **Hauptschule**, which is not part of the vocational education system as such, but which is now introducing the subject 'introduction to working life' (**Arbeitslehre**) mentioned on the previous page.

- *Basic vocational training* in the Basic Vocational Training Year = BVY (**Berufsgrundbildungsjahr**).

- *Skill training* in the 420 or so recognized skilled occupations of the dual system (training firm and **Berufsschule**), also in full-time vocational schools such as the **Berufsfachschulen** and particular types of **Fachschulen**.

The tasks of *adult vocational training* include:

- *Further vocational training*

- as *updating training* (job- or occupation-related), which is provided, for the most part, by firms, the Chambers, industrial and commercial associations and trade unions, and

- as *career development training* (e.g. from skilled worker to industrial foreman or technician), which is primarily the task of the firms or the **Fachschulen**.

- *Retraining* (occupational reorientation), which is carried out in special retraining centres or firms commissioned by the labour authorities.

- *Occupational rehabilitation* (reintegration into working life of adults who have lost some or all of their original qualifications as a result of accident or sickness), which is normally the task of rehabilitation centres.

- *Occupational reactivation* (reintegration into working life), which is mainly the responsibility of the employers.

1.4.4 The universities (an overview)

There are three kinds of universities in the Federal Republic of Germany: academic universities (**Wissenschaftliche Hochschulen**), arts universities (**Kunsthochschulen**) and specialized colleges with university status (**Fachhochschulen**).

The classic form of academic higher education establishment is the university, including the technical university (**Technische Universität** or **Technische Hochschule**) and, in smaller numbers but having equal status, there are academic universities which offer only one course of study, such as medical and theological universities (**Medizinische Hochschulen, Theologische Hochschulen**).

The various kinds of teacher training universities (**pädagogische Hochschulen, erziehungswissenschaftliche Hochschulen**)[12] are likewise included under academic universities- *** in the wider sense. They are, of course, mainly concerned with teacher training and in recent years have been integrated into the universities in some Länder.

In North Rhine-Westphalia there are quite a number of integrated universities (**Gesamthochschulen**). They include training elements from academic universities, specialized colleges with university status and, in some cases, arts universities.

The prerequisite for admission to an *academic* university is the university entrance certificate (**Hochschulreife**), either general or restricted to a specific faculty, which can normally be acquired after thirteen years at school. Most courses of study at academic universities last four years (three at pedagogic universities). In practice, however, most courses last longer than this, some of them considerably longer. For the academic universities the unity of *teaching and research* is an essential principle, and lecturers at such universities are required to undertake both, while students have the right to participate in research projects. *Freedom of tuition and*

12 The courses of study last at least six semesters

research is a principle laid down in the constitution (Art.5, para. 3 of the Basic Law). One manifestation of this is the fact that the state may not exercise supervision over teaching and research, and the expression of scientific and artistic opinions by the teaching staff may not be restricted, while responsibility for the subjects and methods of research rests exclusively with the university teacher (researcher).

There are *arts universities* for fine arts, design, music, films and television. Students are admitted mainly on evidence of special talent or by examinations to establish aptitude.

The *specialized colleges with university status* (**Fachschulen**) came into being at the end of the 1960s and are, in effect, the former higher technical schools (schools of engineering, higher schools of economics, etc.) and here the prerequisite for admission is the **Fachhochschulreife**, the university entrance certificate for these particular institutions, which can normally be gained after twelve years at school. Most courses of study at these colleges last three years and differ from those of the academic universities in that they are more strongly oriented to application and practice.

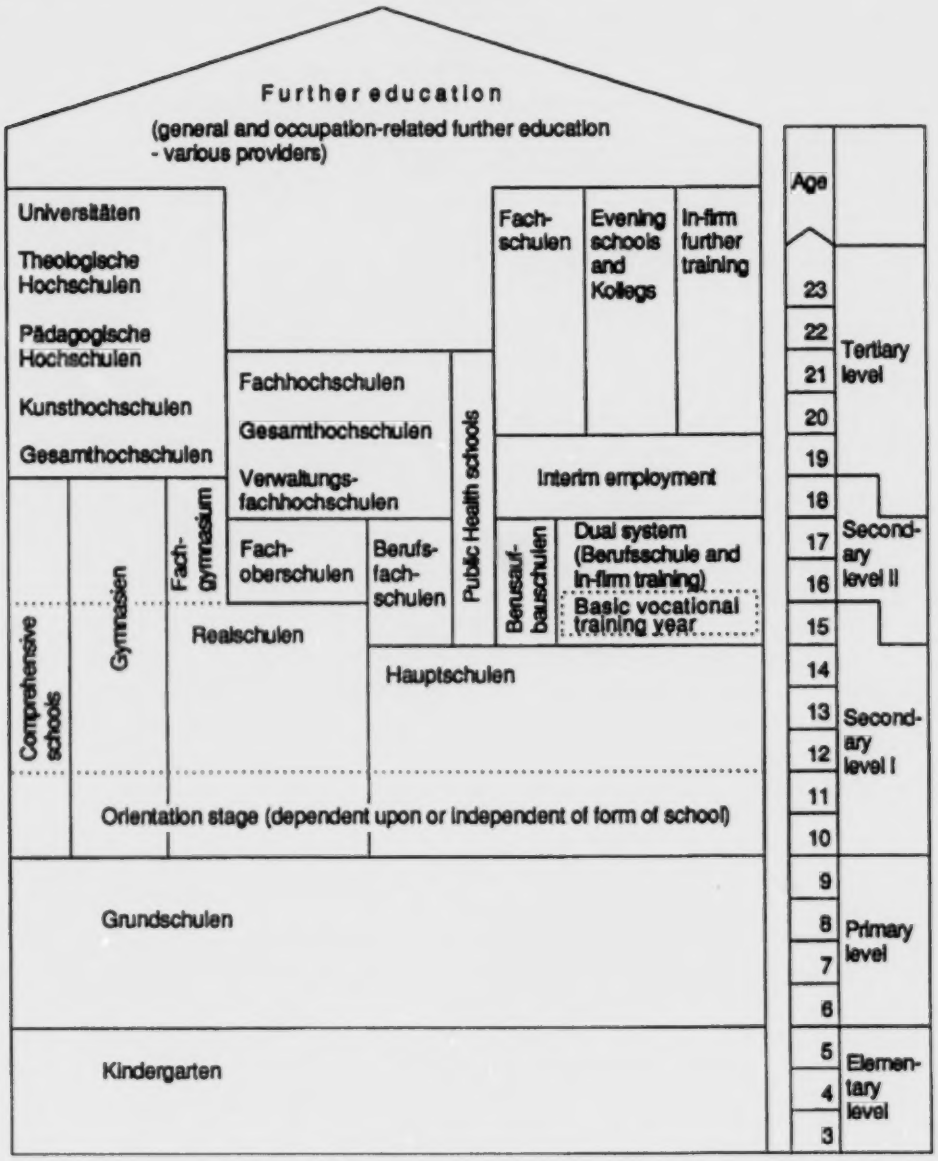
Over the last twenty years, tertiary education in the Federal Republic of Germany has expanded considerably, as is shown by the increase in the number and size of the universities: in recent years there has been an almost explosive increase in the number of students. Whereas in 1960 the total number at universities of all kinds was 291 100, in the winter semester 1985/86 there were 1 338 042 students at the Federal Republic's universities.

In 1960 the proportion of students among the nineteen to twenty-five age group was 4.3%; in 1984 it was 20.9%. The percentage of female students has also risen, albeit not proportionally. In the winter semester 1985/86[13] they account for approx. 38% of the total, which means that, compared with male students, they are still clearly under-represented. This is also true of young working-class people. The fathers of 14.7% of those taking up their studies in the winter semester 1985/86 were blue-collar workers whilst 3.9% had parents who were both blue-collar workers.

The great majority of the more than 240 universities in the Federal Republic of Germany are both corporations under public law and state institutions, on the basis of the Federal Government's university outline legislation (**Hochschulrahmengesetz**) and the university laws of the Länder, in whose competence they lie. Nevertheless, they have extensive rights of self-administration. Notwithstanding the fact that maintaining and running the universities is a matter for the Länder, the Federal Government, pursuant to Article 91a of the Basic Law, cooperates in building and extending universities, including university clinics, which means that the Federal Government participates in providing the necessary investment resources. In addition, under Article 91b of the Basic Law, Government and Länder can, on the basis of agreements, cooperate in the promotion of institutions and projects concerned with scientific research of supra-regional importance. An independent body, the Scientific Council (**Wissenschaftsrat**) has the task of drawing up recommendations within the framework of work programmes, for the development of the universities, science and research, with regard to both content and structure.

13 Federal Statistical Office, Wiesbaden (pub.): University students winter semester 1985/86, "Bildung und Kultur", Series II, Vol. 4.1, p. 146 et seq.

Fig. 7 The education system of the Federal Republic of Germany



2. THE HISTORY OF VOCATIONAL TRAINING

2.1 Introduction

Looking at the past helps towards a better understanding of present realities, their peculiarities and problems. This is also true of the very complex field of vocational training in the Federal Republic of Germany, so this section will be devoted to a brief survey of the history of vocational training. Up to the end of World War II it is the history of vocational training in *Germany* and after that the history of vocational training in the *Federal Republic of Germany*.

The history of vocational training goes back to such varied roots and strands of development that it is impossible to present it in its entirety, with all its aspects, unless one is prepared to sacrifice clarity. Nor is it possible to give a historic-synoptic picture, as the individual parts and aspects of vocational training show such diverse phases of development.

This account, divided as it is into sections, does not aim at completeness; rather does it seek to emphasize those areas and questions which largely determine the present discussion of vocational training policy and will doubtless be of importance in the future.

2.2 The history of apprenticeship training

As in many other European countries, the roots of apprenticeship training in the Federal Republic of Germany reach back to the Middle Ages. But mention must be made of the fact that the *principle* of apprenticeship training already existed in classical antiquity. The master craftsman – apprentice pattern can thus be viewed as an archetypal form of teaching and learning. In Germany it was widespread as *craft apprenticeship* at the end of the thirteenth century but had made its appearance in some places even earlier. The earliest document referring to a regulated apprenticeship is most probably that governing the trade of wood turner in Cologne, dated 1182. By the Late Middle Ages this form of apprenticeship – the path from apprentice to journeyman and finally to master craftsman – had become firmly established. At that time the age of admission to an apprenticeship varied between twelve and eighteen years; similarly, the length of training was not uniformly regulated but averaged about four years. Acceptance of an apprentice into the guild was subject to strict conditions such as legitimate birth, German origins, 'honest' parents, free status (bondsmen and villeins could not become apprentices), and girls could also be accepted.

Apprenticeship training as a whole was subject to the *strict control of the guilds*. But as early as the sixteenth century the decline of the guilds and apprenticeship training was being deplored. The governmental ordinances and police directives of 1530, 1548, 1559, 1577, 1654, 1667 and 1671 were also directed towards the unsatisfactory state of affairs in the guilds, apparently with little success, as their number and sequence indicate. The influence of economic liberalism, combined with increasing industrialization, finally led to the voluntary dissolution of the guilds and from this point apprenticeship training went through a very critical stage, especially in the nineteenth century. Excessively long periods of training (as 'compensation' for non-payment or partial payment of **Lehrgeld** were the order of the day. Engaging an excessive number of ap-

prentices was common practice, since they were cheaper to employ than unskilled labour. Training was, to a greater or lesser degree, badly neglected.

But as early as the middle of the nineteenth century an attempt was made to counter the negative effects of freedom of trade on apprenticeship training, for example through the provisions of the Prussian Trade and Industry Code (**Allgemeine Preussische Gewerbeordnung**) of 1845. Then the last few decades of the nineteenth century and the beginning of the twentieth finally saw a revival of apprenticeship training, with the introduction of various improvements. Two things essentially gave this fresh impetus to apprenticeship training in the crafts: the need for skilled workers resulting from Germany's economic expansion and the two amendments to the Trade and Industry Code in 1897 and 1908. The amendment of 1897, the Protection of Craftsmen Act (**'Handwerkerschutzgesetz'**), restored corporation rights to the guilds and that of 1908 introduced the so-called 'limited certificate of competence requirement' for the training of craft apprentices; after this an employer who wished to provide training had to furnish proof of his status as a *master craftsman*.

From the Middle Ages to the first half of the twentieth century, apprenticeship training was largely confined to the *traditional crafts*; indeed until a few decades ago the crafts had a monopoly of apprenticeship training. Although some industrial establishments were already training their own future craftsmen at the beginning of the nineteenth century, it was not until the twentieth century that steps were taken to establish systematic apprenticeship training in industry on a large scale. Today there is no branch of the German economy which lacks a substantial number of trainees. In the Federal Republic we find trainees in industry and trade as we do in the crafts, also in agriculture, mining and the liberal professions. With around 60 % of all school-leavers in a particular year embarking on vocational training, the dual system of apprenticeship (on-the-job training combined with attendance at part-time vocational school) is – numerically at any rate – the *most important area* of vocational training in the Federal Republic of Germany.

2.3 The history of legal regulation of apprenticeship training

As has already been described, the roots of apprenticeship training in the Federal Republic of Germany go back to the Middle Ages, when vocational training was controlled by the guilds. The admission of the apprentice to the guild, the conclusion of the training contract, the regulations which the master craftsman had to observe and the release of an apprentice from his articles were all matters regulated by the statutes of the guilds. Not infrequently, however, the master craftsman, quite independently of the guild contract, concluded a contract with the apprentice's parents which would lay down, in particular, the amount of the **Lehrgeld** to be paid. But overall, it can be said of this period that vocational training was *no private matter* concerning only the contractual parties (master craftsman and apprentice) but a quasi-legal one subject to the statutes of the guilds.

With the decline of the guilds from the early sixteenth century onwards and the dwindling away of their statutory powers in the field of apprenticeship training also, the door was opened for abuse and arbitrariness.

Despite this, efforts to achieve comprehensive *legal regulation* of apprenticeship training began very late, in fact not until the twentieth century. But there was partial legal regulation prior to this; the Prussian Trade and Industry Code of 1845 lays down that a person may employ apprentices only if he has produced proof of his competence and is a member of a guild. Some of these regulations were incorporated in the Trade and Industry Code of the North German Confederation (1869) and later (1871) in the Reich Trade and Industry Code. But neither of these two codes demanded proof of competence. In 1897 the regulations governing the recruitment of apprentices which had been valid hitherto were, for the first time divided by an amendment to the Reich Trade and Industry Code (Protection of Craftsmen Act) into 'general' regulations for industry and trade and 'special' regulations for the crafts. The craft guilds regained their corporation rights. A further amendment to the Reich Trade and Industry Code (1908) introduced the *'limited certificate of competence'* condition for the training of apprentices in the crafts, under which an employer wishing to provide training had to furnish proof of his status as a master craftsman. The guilds were required to exercise control over apprenticeship training. The two amendments of 1907 and 1908, the so-called 'craftsmen's legislation' gave a fresh and powerful impetus to apprenticeship training in the crafts. In the course of the nineteenth century apprenticeship training was introduced only very gradually into industry and trade, and although it gathered momentum in the early part of the twentieth century the entire development still took place largely outside the field of legislation. True, the Director of the Royal Prussian Railways, Robert Garbe, had already demanded comprehensive legal regulation of apprenticeship matters in 1888 – to include further training schools – but nothing came of this at the time.

At the tenth German trade union congress in Nuremberg in 1919, a declaration on the 'Regulation of Apprenticeship Matters' was adopted which can be regarded as a *first draft* of comprehensive regulations to govern apprenticeship, and thus of a vocational training act such as subsequently came into force in 1969. However, another ten years were to pass before the Reich Government introduced a bill in the Reichstag, but this was not debated and therefore never passed. Nor did anything come of the draft for a vocational training act submitted by the **Akademie für Deutsches Recht**[1] in 1942, mainly because Germany was then at war. After World War II came fresh efforts to achieve comprehensive legal regulation of vocational training, the initiative again coming from the trade unions; for example, the first interzonal conference of young trade unionists in Hallthurn in 1948 demanded a 'vocational training act applicable to the whole of Germany'. The 'Law for the regulation of vocational training and the working conditions of young people' which came into force for *West Berlin* on 16 January 1951 brought comprehensive regulations for apprenticeship training and also covered apprentices in industry, trade, agriculture, etc. But in Federal territory, the relatively detailed provisions of the 'Law to regulate the craft trades' of 23 September 1953 applied only to the *crafts* and a law to amend this was passed on 15 September 1965 (**Gesetz zur Änderung der Handwerksordnung**).

In 1959 the German Trade Union Federation reopened the discussion about a vocational training act with its 'Draft for an initial vocational training act for the Federal Republic of Germany'. Finally, after some deviations and difficulties which cannot be gone into here, a *Vocational Training Act* (**Berufsbildungsgesetz**) was passed by the German Bundestag and this came into force on 1 September 1969. This act regulates *apprenticeship training* (vocational training)

1 Academy of German Law

in the undertakings of *all branches of the economy*, also *further vocational training* and *retraining*.

Of all the legal regulations in the western world, the Vocational Training Act of the Federal Republic of Germany undoubtedly represents the most comprehensive and detailed regulatory framework for apprenticeship training.[2]

Nevertheless, the passing of this act was a compromise. In its governmental declaration of 18 January 1973 the Federal Government already acknowledged that the Vocational Training Act would have to be completely revised. The Government's draft of the Vocational Training Act of 16 April 1975 to amend the Vocational Training act of 1969 was to

- remedy deficiencies in the content of the 1969 law,
- lay down an organizational form for vocational training which combined public responsibility with codetermination rights for those involved in training,
- introduce financing regulations oriented to requirement criteria and
- facilitate prescient and coordinated planning of vocational training so that economic and technical changes shall not adversely affect the claims of young people to vocational training.[3]

However, the Länder governed by the Christian Democrats and the Christian Socialists, who had a majority in the Bundesrat, rejected the bill. As an alternative, the Bundestag then passed a bill which was, to a certain extent, supplementary to the existing (1969) Vocational Training Act and did not require the agreement of the Bundesrat. This was the 'Law to promote the availability of training places in vocational training'- the Training Place Promotion Act (**Ausbildungsplatzförderungsgesetz**). This law has a section dealing with the financing of vocational training, one on 'Planning and statistics' and one on the 'Federal Institute for Vocational Training' (**Bundesinstitut für Berufsbildung**) (formerly known as the 'Federal Institute for Vocational Training Research' in accordance with the 1969 Vocational Training Act).

Following a complaint of unconstitutionality by Bavaria, however, the Federal Constitutional Court ruled on 10 December 1980 that the Training Place Promotion Act was null and void because it contained some procedural regulations which would have required the approval of the Bundesrat. Reacting to this, the Federal Government, on 21 January 1981, introduced a draft for a 'Law to promote vocational training through planning and research' (**Berufsbildungsförderungsgesetz**) which was intended 'legally to safeguard already proven and disputed instruments for the further qualitative and quantitative development of vocational training'. This Vocational Training Promotion Act was passed on 23 December 1981 and came into force on 1 January 1982. The new act contains no regulations concerning financing but is otherwise essentially the same as the Training Place Promotion Act that was declared null and void.

---

2 Details are to be found in various sub-sections of Section 3 (The dual system of vocational training).

3 Taken from the Federal Government's reasons for the governmental draft.

If we examine the arguments about the legal regulation of vocational training in firms more closely, we find that all the interested parties – especially employers and workers – attach great importance to the educational aspect of vocational training but also to its social and economic significance, but if we follow the direction of these individual interests we find that some of them diverge sharply. Against the background of the political, social and economic realities of the Federal Republic of Germany it can be said that the employers and their representatives tend to stress the concept of autonomy and minimum legal regulation for vocational training in firms. In contrast, the workers and their trade unions demand that in-firm training be more closely integrated into the publicly-run education system with increased public responsibility and, accordingly, a tighter network of legal regulations.

2.4 The history of the training workshops

As long as production and services were characterized by straightforward work processes which could be directly experienced, and as long as division of labour was restricted to differentiating between occupations, also the work was determined more by experience handed down than by scientific-technical reasoning, a young person learnt his trade exclusively in the production workshop until the early nineteenth century – the workplace learning venue (**Lernort**). With the growth of the industrial economy at the end of the eighteenth century and more especially during the nineteenth century, marked as it was by the division of work processes into component parts, by mechanization and rationalization and the increasing remoteness of the worker from the end product, training exclusively at an industrial workplace no longer ensured a comprehensive vocational qualification. This was one reason why industry, in the nineteenth century, provided vocational training to only a limited extent, drawing its young skilled labour from the crafts or, in relatively rare instances, establishing *training workshops*. These enabled – and still enable – basic skills and knowledge to be imparted in a planned and systematic way across the breadth of a particular occupation at least, and this without being affected by the changing and special demands of the job. As a rule the training workshop did not, and does not, replace the workplace learning venue but supplements it.

Industrial training workshops correspond to training laboratories in the chemical industry, training sites in construction and model offices (rarer) in administration and commerce. But only very occasionally did industrial firms make use of this new learning venue at first. Not until the end of the nineteenth century were training workshops established in any numbers and here the Prussian Railways were the pioneers. But few firms followed their example and set up their own training workshops from the 1890s onwards.

In addition to these workshops set up by individual industrial firms, *group training workshops* were established in commerce, the crafts and agriculture to supplement on-the-job training, but again only in isolated instances during the nineteenth century. Unlike today's group training workshops, these imparted elementary general and specialized theoretical knowledge, some of them placing the main emphasis on this. 'Training workshops' for clerical occupations – i.e. model offices – were, as far as is known, first established after 1900. By 1926 there were sixty-eight training workshops, most of them maintained by the metal industry, while the Reichsbahn (German Railways) had 107 training workshops of its own. This figure provides impressive proof of the fact that the Prussian State Railways and, subsequently, the Deutsche Reichsbahn, can

be regarded as forerunners in the development of training workshops in Germany. From 1933 onwards, under the National Socialists, the number of training workshops rose rapidly, reflecting the drive for economic self-sufficiency. Whereas in 1936 there were 691 training workshops, by 1940 their number had already risen to 3 304 and reached around 5 000 by 1944.[4] After 1945 the numbers fell (1 034 in 1952) and then gradually increased again to 1 658 in 1958 and 2 069 in 1963. In 1972 there were about 4 000 training workshops in the Federal Republic of Germany.[5]

The latter half of the 1970s brought a great expansion of the system of group training workshops and in 1980 they provided 50 000 workshop places for both young people and adults.[6]

2.5 The history of regulatory instruments for on-the-job vocational training[7]

The development of regulatory instruments in the present strict sense of the term, namely instruments which lay down the content of on-the-job training in the form of *skilled occupation descriptions, outline training plans* and *examination requirements*, did not really begin until the 1930s. Up to that time, determining the content of vocational training according to the type and level of qualification had been a matter for the guilds and – for industry and commerce – the individual training firms or Chambers. There were no uniform regulations for either individual Länder or the country as a whole. 'Regulatory instruments' of this kind were first developed in 1925 by the German Committee for Technical Education (**Deutscher Ausschuss für technisches Schulwesen = DATSCH**), set up by the employers.

From 1935 onwards the skilled occupations and their regulatory instruments, the Training Ordinances (**Ausbildungsordnungen**), had to be recognized by the Reich Minister for Economics and in 1939 **DATSCH** was converted into a governmental institution – the Reich Institute for Vocational Training in Commerce and Industry (**Reichsinstitut für Berufsbildung in Handel und Gewerbe**). By the end of the war, this institute had developed regulatory instruments for nearly 1 000 skilled and semi-skilled occupations.

After the war this work was continued by two offices set up in Dortmund and Munich in 1947 by the Chambers of Industry and Commerce, then by the organization which succeeded them, the Office for Vocational Training of the Association of German Chambers of Industry and Commerce (**Arbeitsstelle für Berufserziehung des Deutschen Industrie- und Handelstages**) and finally, from 1952 onwards, by the Office for In-firm Vocational Training (**Arbeitsstelle für betriebliche Berufsausbildung**) in Bonn.

---

4 These figures include 'training bays'.

5 More recent figures are not available.

6 Cf. The Federal Minister for Education and Science (Pub.): Vocational Training Report 1981, p. 28 et seq.

7 Cf. cap 3.7.1 and 3.8.

Under the Vocational Training Act of 1969 the tasks of the Office for In-firm Vocational Training were transferred to the Federal Institute for Vocational Training Research and, after the passing of the Training Place Promotion Act[8] in 1976, to the Federal Institute for Vocational Training.

Recognition of the regulatory instruments, known as Training Ordinances since the advent of the Vocational Training Act (Art. 25), takes the form of *statutory instruments* issued by the competent Minister[9] in agreement with the Federal Minister for Education and Science. Before the passing of the Vocational Training Act (VTA), the regulations for the traditional crafts were different from those which applied to industry, commerce, agriculture, etc., and here the preparatory work for publication of Training Ordinances was done by the craftsmen's associations. The drafts were then examined by the Crafts Institute of the University of Cologne and submitted to the German Trade Union Federation. After that the Association of Crafts Chambers recommended that the organs of the Crafts Chambers draw up 'specialized regulations' for submission to the Ministers of Economics of the Länder for approval. Uniformity throughout the Federal Republic was assured by the fact that the Federal Minister for Economics recommended that the Economics Ministers of the Länder should approve only harmonized and standardized regulations.

2.6 The history of the vocational schools

In the Federal Republic of Germany there are essentially five types of vocational schools[10] **Berufsschulen** (part-time vocational schools), **Berufsfachschulen** (full-time vocational schools), **Berufsaufbauschulen** (higher grade vocational schools), Fachoberschulen (higher technical schools) and **Fachschulen** (technical schools).

In this section we shall trace the historical development of each type of school, while accepting the fact that in so doing it will not always be possible to clearly separate the development processes of the Berufsschulen, the Berufsfachschulen and the Fachschulen in particular.

The *Berufsschulen* have their origins, above all, in the religious Sunday schools founded mainly in the eighteenth century (e.g. in Prussia) and the industrial Sunday schools (such as those in Württemberg). The first kind featured what could be termed refresher lessons after the service for those who had left the publicly-run school of that time, the Volksschule, but the industrial further education schools were entirely secular, the motivation for their foundation being primarily commercial; consequently they were already providing instruction in arithmetic, drawing, mechanics and general technology. Whereas the religious Sunday schools were dedicated, above all else, to the Christian ethic, the industrial Sunday schools were oriented to the ideas of the Enlightenment and mercantilism.

---

8 Superseded by the Vocational Training Promotion Act which came into force on 1 January 1982.

9 Which Minister is competent is determined by the nature of the occupations. For those in industry, commerce and the crafts the Federal Minister for Economics is responsible, and for occupations in agriculture the Federal Minister of Food, Agriculture and Forestry.

10 Cf. 'Designations of Vocational Schools, Decision of the Standing Conference of the Ministers of Culture of 8 December 1975'. Documentation, No. 1.

During the late nineteenth century *general further education* schools developed from the religious Sunday schools and as early as the first half of that century *industrial further education schools* had emerged from the industrial Sunday schools; while the latter were clearly oriented in aims and contents to the needs of industry and commerce, the main task of the general further education schools was still the continuation of education begun at the Volksschule.

By about 1900 the *vocationally-structured further education school* had become established throughout Germany, a school organized on the principle of the *specialized class*, with the *occupation of the pupil* as its didactic focal point. Now the young people no longer attended on Sundays or in the evening but, as a rule, once a week in the morning or afternoon of a working day.

Since the 1920s '*Berufsschule*' has become the accepted term for the further education and training school in both official and pedagogic language. Measured by the number of its pupils, the Berufsschule is the most important vocational school in the Federal Republic, being attended by every second young person.

The Trade and Industry Code of the North German Confederation[11] published in 1869 contains a permissive regulation on the local introduction of compulsory further education for young people employed in industry and commerce. 'Under the By-law (Art. 142) journeymen and apprentices under the age of eighteen, or individual classes of such persons, can be required to attend a local further education school, while employers are obliged to grant the necessary time for such attendance'. But the communes were initially slow to take advantage of this opportunity to make young people attend a further education schools. In 1837 Saxony became the first German Land to introduce compulsory further education for boys for a period of three years. This was still unknown in Prussia but by 1900 by-laws provided for compulsory further education in most of its larger towns. The Reich Constitution of 1919 (known as the Weimar Constitution) postulated compulsory further education up to the eighteenth birthday (Art. 145) but for various reasons by no means all the German Länder passed the necessary laws for the realization of this concept. Whereas Saxony, Baden, Thuringia, Hessen, Hamburg, Oldenburg and Lippe introduced compulsory further education for both sexes, Prussia continued to abide by the by-law provisions of the Reich Trade and Industry Code in this matter. Attendance at vocational school was not compulsory throughout Germany until the Reich Compulsory Education Act (**Reichsschulpflichtgesetz**) of 6 July 1938 came into force. Under the Basic Law of the Federal Republic of Germany (8 May 1949) the Länder have the right to legislate for educational matters and therefore for compulsory education (as was the case in imperial Germany and in the Weimar Republic). In every Land of the Federal Republic there are school laws or special laws concerning compulsory education which regulate the general requirement to attend vocational school.

The origins of the *Berufsfachschulen* and the *Fachschulen* are multifarious and, to some extent, interwoven, because it was not until this century – through an ordinance published by the then

'Reich Minister for Education' on 29 October 1937 – that a clear differentiation was made between these two schools (and the Berufsschule). We can see the beginnings of the Berufsfach-

11 **Norddeutscher Bund**

schulen and the Fachschulen in the fourteenth-century schools which taught reading, writing, arithmetic and book-keeping, also in the arithmetic schools of the seventeenth century and in such establishments as the 'Hamburg Institute for the Education and Training of the Young Clerk' towards the end of the eighteenth century. In the eighteenth century there appeared, in the most varied places, trade schools which already bore a strong resemblance to present-day commercial schools as a special form of the Berufsfachschule. The Knights' Academies (Ritterakademien) of the seventeenth and eighteenth centuries, viewed from today's standpoint, were Fachschulen which trained the sons of the nobility to become practicians in the construction industry, in agriculture and the crafts, and also for administration and the army; their aims and contents were secular and realistically oriented. The 'Technical Institute' which was opened in Berlin in 1921, and later became the Technical University, was by today's standards a Berufsfachschule, while the provincial trade schools founded in Prussia in the first half of the nineteenth century can be regarded as the precursors of both the Berufsfachschulen and the Fachschulen. Whereas even now there is a preponderance of the clerical-administrative type of Berufsfachschule, this is not the case with the Fachschulen, where the variety of content reflects the very broad spectrum of highly-qualified specialists needed in all branches of the economy. The 'Designations of Vocational Schools – Decision of the Standing Conference of the Ministers of Culture of 8 December 1975' and the resulting definitions of the various types of vocational schools represent, for the Berufsfachschulen and the Fachschulen in particular, the lowest common denominator.

Until 1969 the schools of engineering and higher schools of economics were regarded as higher technical schools (**Höhere Fachschulen**) and included among the vocational schools until they became specialized colleges with university status in that year.

Berufsaufbauschulen (part-time and full-time) are primarily a post-war development; this period also saw the foundation and expansion of **Fachgymnasien, Berufsoberschulen** and similar schools, also the **Kollegs** – all of them leading to the university entrance certificate and forming part of the 'second (vocational) educational path' (**zweiter Bildungsweg**). The *Fachoberschulen* have a particularly short history, having been established in 1968/69 as avenues leading to the former schools of engineering and higher economics after these had acquired the standing of specialized colleges with university status.

2.7 The history of the dual system

The dual system, which is the name given in the Federal Republic of Germany to the system of cooperation between firm and vocational school in initial training (apprenticeship training), has, in fact, existed since the founding of the vocational further education schools, forerunners of today's Berufsschule. Yet the term is relatively new: in its 'Expertise on vocational training and education' (1964) the German Commission for Education (1953–65) refers to 'dual' training on the job and at school (Berufsschule). Since then the expression 'dual system' has become generally accepted in both vocational training and vocational pedagogic circles, despite the fact that it is neither a fitting nor adequate appellation for this phenomenon.

Fig. 8 The history of vocational training – a survey of important dates

Time	Apprenticeship training	Legal regulation of apprenticeship training	Training workshops	Regulatory instruments for in-firm training	Vocational schools	Dual System
1182	First known guild ordinance 'Ordinance of the wood turner of Cologne'					
By end of 13th century in 14th century	Craft apprenticeship widespread Apprentice - journeyman-m. craftsman trg. regulated by guilds	Acceptance of apprentice regulated by guild statutes. Vocational trg. semi-legally regulated				
					Roots of the Berufsfachschule and Fachschule: schools for writing, reading, arithmetic & book-keeping	
In 16th and 17th centuries	Decline of the guilds & apprenticeship. Neglect of training through impoverishment of craftsmen. 'Performance instead of trg.'	Abuse af apprenticeship system. Lack of regulation & supervision al dissolution of guilds begins			Roots of the Berufsfachschule	
18 th century	Voluntary Dissolution of guilds under influence of economic liberalisn & beginning of industrialization			Founding of religious Sunday Schools (Prussia) and industrial Sunday schools (Württemberg) First trade Schools		
Early 19th century			1821 First trg. workshop in Germany			
Mid-19th century	Beginning of legal regulation of apprenticeship training 1845 Prussian Trade & Industry Code 1869 Trade & Industry Code of the North German Confederation. 1871 Reich Trade & Industry Code			Founding of Prussian provincial indus. schools. Industrial Sunday schools become established		
End of 19th century	1897 Amendment to Reich Trade and Industry Code (Protection of Craftsmen Act) Large firms begin training their own apprentices	1897 Commercial code (**Handelsgesetzbuch**)	Prussian Railways establish many trg. workshops		General further education schools	Most apprentices attend industrial further edn. schools. This marks beginning of dual system: trg. in firm/Berufsschule

Early 20th century	1908 Amendment to Reich Trade and Industry Code ('Limited certificate of competence')	1919 German Trade Union Congress, Nuremberg. Declaration: 'Regulation of apprenticeship matters'	A few training offices established	German Cttee. for Technical Edn. prepares first regulatory instruments (1925)	1900 Vocational further edn. schools. Apprentices taught in classes according to ocon. 1920 Designation 'Berufsschule' appears	
Mid-20th century		1953 'Law to regulate the Craft Trades' (23 September)	No of trg. workshops rises to about 5000 by 1944. Drops sharply after 1945	1939 Reich Institute for Voc. Trg. in the Crafts and Industry. From 1939 to end of war prepared reg. instruments for nearly 1000 skilled & semi-skilled occns.	1938 General compulsory voc. edn. in Germany (6 July) 1949 Basic Law: Länder have cultural autonomy so responsible for Berufsschule. Founding of Berufsaufbauschulen, Fachgymnasien, Berufsoberschulen, Kollegs awarding univ. entrance cert. Second educational path	German Commission for Edn. (1953-65), in expertise on voc. trg. & schools, refers to 'dual' trg. in firm and school
Since 1965	1980 About 60% of all young people undergo apprenticeship trg., the most important part of the voc. training system	1965 'Law to amend the Crafts Code' (15 September) 1969 Comprehensive legal regn. of apprenticeship trg.: Vocational Training Act (14 August) 1976 Training Place Promotion Act (7.September) 1981 Above act replaced by the Vocational Training Promotion Act (came into force 1 Jan. 1982)	No. of trg. workshops rose again to about 4000 in 1972	Legal regulation of regulatory instruments ('Training Ordinances') through Article 25 of the Vocational Training Act (1969) Outdated Training Ordinances abolished, remainder modernized. New Training Ordinances developed. 1980 Approx. 450 recognized skilled occupations with corresponding Training Ordinances.	1969 Founding of Fachoberschulen. Schools of engineering and higher schools of economics become specialized colleges with university status. 1975 'Designation of vocational schools - Decision of the Standing Conference of the Ministers of Culture dated 8 December'.	'Dual system 'becomes an accepted term in vocational pedagogics and vocational training

3. THE DUAL SYSTEM OF VOCATIONAL TRAINING

3.1 Structural features and importance of the dual system

In the Federal Republic of Germany the training of skilled workers[1] takes place mainly within the dual system. As has already been mentioned, this system has a long tradition but the term was first coined by the German Commission for Education (1953–1965). It means a training organization in which the efforts of two very different providers of training, the normally *private firms* and the usually *publicly-run vocational schools*, cooperatively and with a certain division of tasks, are directed towards a particular group (who are both trainees and vocational school pupils) for a substantial period. The firms very often make use of *various learning venues*, that is to say not only the workplace itself but also the training workshop and in-firm instruction. In the vocational schools the main learning venue is the classroom but workshops, laboratories, and model offices, etc. are also used to a lesser extent and for shorter periods.

Training in the firms is regulated by a Federal law (Vocational Training Act), while vocational school instruction is the responsibility of the Federal Länder (school laws).

A young person undergoing vocational training within the dual system is both a *trainee* and a *vocational school pupil* (a **Lehrling** and a **Berufsschüler**); the first status arises from the *training contract* (**Ausbildungsvertrag**) – formerly known as indentures in the United Kingdom – which he has completed with his employer.[2] Pursuant to the school laws or *compulsory education laws* he is a vocational school pupil. The youngsters attend the Berufsschule on one or two days a week, spending the remaining days in the firm.

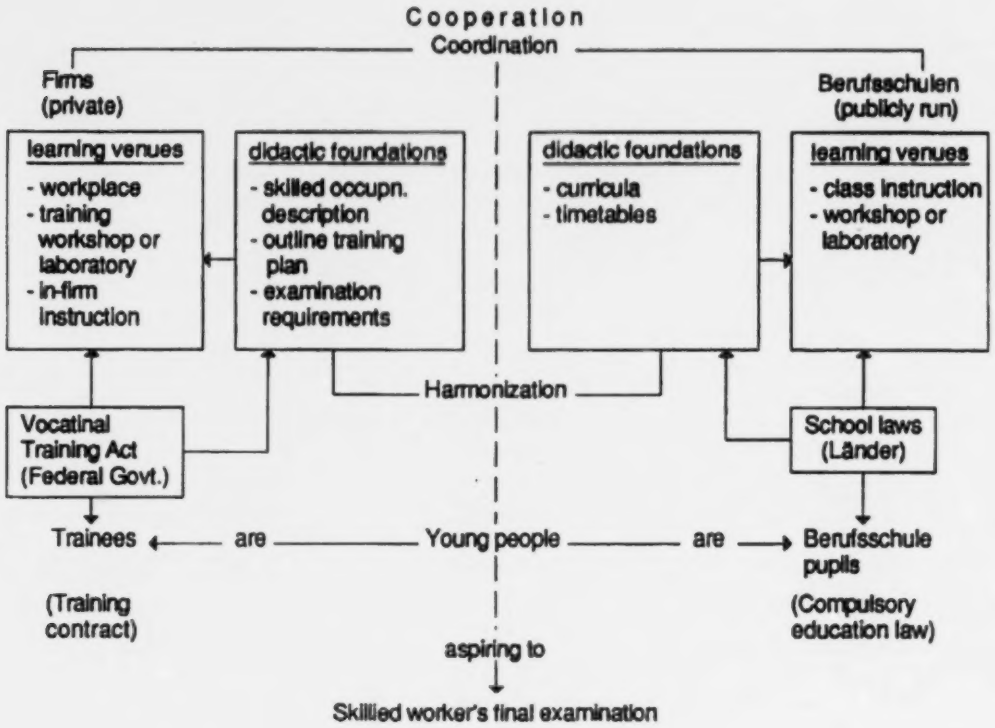
There is also the *block system*, with certain specified periods at the Berufsschule alternating with those spent on the job.[3]

1 This term also covers training for the crafts, clerical work and so on.

2 Ultimately responsible for training, and not always a physical person. Cf. p. 80.

3 Cf. p. 115 et seq.

Fig. 9 The pedagogic structure of the dual system



At the present time approx. two thirds of all young people undergo vocational training within the dual system, which makes it numerically the most important part of the vocational training system of the Federal Republic of Germany. It is a flexible system in that through the abolition of outdated Training Ordinances and recognized skilled occupations, the modernization of existing ones and the development of new ones, it can not only react relatively quickly to the needs of the economy but also take into account the changing demand for training places. This was particularly apparent in recent years, when the school-leaver bulge necessitated considerable expansion of training opportunities. A survey of figures for trainees over the last eighteen years gives us the following table.

Tab. 13 Numbers of trainees[4]

Year	Total number of trainees	Female trainees
1970	1 270 120	448 746
1971	1 273 078	456 906
1972	1 302 751	465 528
1973	1 330 801	470 595
1974	1 330 768	466 053
1975	1 328 906	469 946
1976	1 316 562	474 931
1977	1 397 429	510 247
1978	1 517 373	566 389
1979	1 644 619	621 615
1980	1 712 716	652 244
1981	1 676 966	647 845
1982	1 675 861	654 034
1983	1 721 686	676 235
1984	1 800 001	718 784
1985	1 831 265	743 768

The recognized skilled occupations in which young people are trained within the dual system, and therefore the trainees themselves, are found in all branches of the economy, as the following survey shows:

Tab. 14 Trainees (total) according to training sector (in%)[5]

Year	Industry,- commerce & service industries	Crafts	Agri-culture	Public service	Liberal professions	Home Economics	Navi-gation
1975	633 958	504 662	32 954	45 925	103 172	7 319	908
1976	611 173	510 356	37 361	43 850	106 625	6 797	902
1977	643 817	556 088	41 003	44 841	103 431	7 215	959
1978	691 985	614 905	45 176	51 726	104 745	7 803	1 033
1979	748 400	676 215	46 565	53 838	110 422	8 136	1 043
1980	786 917	702 331	46 791	53 816	117 087	7 555	984
1981	771 347	673 564	46 525	54 278	123 646	6 624	893
1982	764 708	665 525	49 616	58 328	128 500	8 354	833
1983	791 895	674 903	51 846	63 723	129 696	8 755	868
1984	841 081	693 233	53 247	69 184	132 310	9 934	1 012
1985	874 614	687 454	53 396	72 620	131 458	10 641	1 082

4 Index of recognized skilled occupations. Pub: Federal Institute for Vocational Training. 1986 edition, p. 244.

5 Calculated from: Federal Institute for Vocational Training (Pub.): Index of recognized skilled occupations, 1983 edition, p. 223.

The numbers of trainees in the individual recognized skilled occupations vary considerably according to prevailing economic-structural factors. Whereas, in 1985, 82 231 apprentices were being trained for the most popular occupation (salesperson), in a few occupations (e.g. music engraver and makers of manually operated bellows instruments, such as accordians, concertinas) there were only one or two trainees.

In 1985 the ten most popular occupations accounted for 620 442 trainees, which was 44.9% of the total.

Tab. 15 Trainees in the ten most popular occupations, in order of popularity (1985)[6]

Ranking	Occupation	Trainees
1	Salesperson[1)2)]	82 231
2	Motor-vehicle mechanic	81 791
3	Hairdresser	71 102
4	Industrial clerk[2)]	66 145
5	Office clerk	59 776
6	Bank clerk	55 848
7	Electrician	53 794
8	Clerk, wholesale & foreign trade[2)]	51 239
9	Salesperson, foodstuffs	50 207
10	Engineering fitter-machinist	48 129

1) Stage 1
2) Including a small number of apprentices being trained in the crafts.

With a few exceptions, all occupations are, in principle, open to both males and females. In practice, however, there are typical male and typical female occupations.

6 From: Basic and Structural Data 1986/87, p. 95.

Tab. 16 Trainees in the ten most popular recognized skilled occupations according to popularity and sex (*female* trainees) 1987[7]

Ranking	Occupation	Trainees (female)
1	Hairdresser	61 406
2	Saleswoman[1)2)]	62 994
3	Saleswoman, foodstuffs	49 577
4	Office clerk	48 055
5	Industrial clerk[2)]	41 154
6	Doctor's assistant	38 967
7	Dentist's assistant	29 385
8	Bank clerk	28 683
9	Clerk, retail trade (stage 2)	27 165
10	Clerical assistant	25 506

1) Stage 1
2) Including a small number of trainees in the "crafts" sector.

Tab. 17 Trainees in the ten most popular recognized skilled occupations according to order of popularity and sex (*male* trainees) 1985[8]

Ranking	Occupation	Trainees (male)
1	Motor-vehicle mechanic	81 168
2	Electrical fitter	53 366
3	Engineering fitter-machinist	47 540
4	Painter & decorator	38 138
5	Joiner	37 938
6	Plumber	32 059
7	Mason/bricklayer	29 900
8	Clerk, wholesale & foreign trade	29 306
9	Baker	28 706
10	Bank clerk	27 165

In recent years the matter of typical boys' occupations and typical girls' jobs has become a topical issue problems since it means that girls have only a narrow spectrum of occupational choices, which considerably restricts their chances of acquiring vocational training and subsequent skilled employment. With the aid of pilot projects, researchers are now seeking to find out how girls can be introduced to, and trained in, occupations which have hitherto been the preserve of the male sex. For a number of years the titles of many occupations have been given in

7 From: Basic and Structural Data 1986/87, p. 97.
8 From: Basic and Structural Data 1986/87, p. 96.

both male and female forms, for example "Fluggerätemechaniker/Fluggerätemechanikerin" (airframe mechanic). However, the number of girls wishing to undergo vocational training for a technical/industrial occupation is still very small.

3.2 Legal aspects of the dual system

3.2.1 The legal foundations of on-the-job vocational training

3.2.1.1 The responsibility of the Federal Government for on-the-job training

Responsibility for vocational training in *firms* rests with the *Federal Government* and this area of training is legally regulated by the Vocational Training Act of 14 August 1969, which is a Federal law.

Constitutionally it is classified not as educational law but as labour and/or commercial law. Only with this prerequisite was Federal regulation and uniform legal regulation of on-the-job apprenticeship training throughout the Federal Republic possible. That the question of the competence norm is a matter of dispute among constitutional lawyers is of no importance. Some take Article 74, No. 11 of the Basic Law (competing competence for the law of commerce) as the basis for their arguments, others Article 74, No. 12 of the Basic Law (competing competence for the law of labour).[9] That the legal regulations covering apprenticeship training do not represent educational law also follows from the 'Act for the provisional regulation of the law concerning the Chambers of Industry and Commerce' dated 18 December 1956 (in the version amended by the Vocational Training Act of 14 August 1969). Pursuant to this, the Chambers of Industry and Commerce can 'establish, maintain and support installations and institutions which serve to promote industry, commerce and the crafts or individual branches thereof, also they can take measures to promote and implement the relevant legal regulations, in particular the Vocational Training Act' (Art. 1, para. 2). Other Federal legal regulations (pursuant to Art. 74, No. 11 of the Basic Law) which, to some extent, affect apprenticeship training are:

- the Employment Promotion Act (**Arbeitsförderungsgesetz**) of 25 June 1969,
- the Works Constitution Act (**Betriebsverfassungsgesetz**) of 15 January 1972,
- the Crafts Code (**Handwerksordnung**) of 28 December 1965, last amended by the Vocational Training Act of 14 August 1969,
- the Young Persons (Protection of Employment) Act (**Jugendarbeitsschutzgesetz**) of 9 August 1960 in the version of 12 April 1976,

---

9 To the extent that legislative competence in the Federal state is not assigned exclusively to central government (the Federal Government) or the constituent states (the Länder), there is legislative competition. In the Federal Republic of Germany, under Art. 72 of the Basic Law, in the field of competing legislation the Länder are competent to legislate as long as, and to the extent that, the Federal Government does not make use of its right to legislate.

- the Act for the provisional regulation of the law concerning the Chambers of Industry and Commerce (**Gesetz zur vorläufigen Regelung des Rechts der Industrie- und Handelskammern**) of 18 December 1956 in the version amended by the Vocational Training Act of 14 August 1969,

- Law for the promotion of vocational training through planning and research – Vocational Training Promotion Act (**Berufsbildungsförderungsgesetz**) of 23 December 1981, amended by the "First Act Amending the Vocational Training Promotion Act" of 4 December 1986.

Under the Basic Law (Art. 70) these laws come within the field of competing legislation, for which the approval of the Bundesrat is required to make a Federal law legally effective. Federal competence also embraces training facilities at shop floor and firm level and covers group training centres maintained by an association of firms or other institutions, even when their working methods hardly differ from school-based forms of teaching and learning.

3.2.1.2 The Vocational Training Act and other laws

The most important legal foundation for on-the-job vocational training is the *Vocational Training Act of 14 August 1969.*

For the craft trades, however, the Act to regulate the craft trades – Crafts Code (**Handwerksordnung**) – in the version of 28 December 1965, amended by the Vocational Training Act of 14 August 1969, also applies. With the passing of the Vocational Training Act, the second part of the Crafts Code – which regulates vocational training – was amended and, in effect, brought into line with the provisions of the VTA (cf. Art. 100, VTA). As far as vocational training in trades shown in Annex A of the Crafts Code[10] is concerned, Articles 20 to 49, 56 to 59, and 98 and 99 of the Vocational Training Act do not apply; here the provisions of the Crafts Code are applicable (cf. Art. 73, VTA). But these are essentially the same as the corresponding provisions of the Vocational Training Act. The remaining parts of the VTA, particularly those relating to the law of contract, apply in full to vocational training in the crafts. The *substantive purview* of the VTA embraces not only *vocational training* but also *further vocational training* and *retraining.*[11]

The act covers vocational training in general and thus apprenticeship training also in so far as it is not carried out in the vocational schools, where the school laws of the Länder apply (Art. 2, para. 1, VTA). It does not apply to vocational training where there is a contract of service under public law or on board merchant ships (Art. 2, para. 2).

A feature of the Vocational Training Act is that firms are, specifically, legally entitled to assume responsibility for, and direct, vocational training, having regard to the legal framework provi-

---

10 The trades shown in Annex A of the Crafts Code are craft trades in the traditional sense. As regards vocational training in the occupations shown in Annex B of the Crafts Code, which are regarded as 'similar to the craft trades', the Vocational Training Act applies in its entirety. Cf. Documentation Nos. 2 and 3.

11 Vocational training in the sense of the Vocational Training Act 'is vocational training, further vocational training and vocational retraining' (Art. 1 para. 1, VTA).

sions. The prerequisites and framework provisions include, for example, the personal aptitude and technical competence of the trainer or the trainer commissioned by him (Art. 20), the suitability of the training place (Art. 22) and compliance with the Training Ordinances (Art. 28, para. 1).

While the firms are entitled to provide vocational training, they are not obliged to do so. At present some 25% of all firms belonging to Chambers of Industry and Commerce and Crafts Chambers exercise this right, a total of about 400 000 training firms.[12] It is estimated that these firms, taken together, represent 60%–80% of all those in employment.

The Young Persons (Protection of Employment) Act of 9 August 1960, in the version of *12 April 1976*, lays down, in addition to special protective regulations for trainees and other young workers (e.g. regulations governing working time, breaks, night rest, leave, etc.,), that the employer is obliged to grant the young employee the necessary time for compulsory attendance at vocational school (Art. 9). An important provision here is that attendance at vocational school may not result in any loss of pay for the trainee or the young worker.

The Works Constitution Act of 15 January 1972 also includes on-the-job training in its purview, together with the participation rights of the works council in the promotion and implementation of on-the-job training measures.

The most important provisions, in particular Articles 96, 97 and 98, are given in the Annex.[13]

Under Article 96 the employer must, at the request of the *works council*, discuss the matter of vocational training with the firm's employees, and here the works council can make suggestions. Pursuant to Article 97 the employer is required 'to discuss with the works council the establishment and equipment of in-firm facilities for vocational training, the introduction of on-the-job vocational training measures and participation in off-the-job training measures'.

According to Article 98, para. 1, the works council has the right of codetermination in the implementation of on-the-job training measures. Furthermore, it can (para. 2) 'oppose the appointment, or request the removal, of a person charged with carrying out in-firm training if that person lacks the necessary personal or technical qualifications, in particular the requisite knowledge of the teaching methods required in the sense of the Vocational Training Act, or neglects his duties'. Under Article 70 of the Works Constitution Act the representatives of the young employees, known as the *youth delegation*, have, among others, the following tasks, which also affect apprenticeship training: the delegation must apply to the works council for the introduction of measures which would serve the interests of the young employees, especially in the matter of vocational training; it must also receive suggestions from young employees, particularly those relating to vocational training, and, if they appear to be well-founded, ensure that they are dealt with by the works council.

The Vocational Training Promotion Act of 23 December 1981 contains regulations concerning vocational training planning, training statistics and the Vocational Training Report. In addition it

12 Excluding agricultural undertakings and those of the liberal professions (e.g doctors' practices) etc.

13 Cf. Documentation, No. 4

regulates the legal status, the tasks and the organization of the Federal Institute for Vocational Training.

3.2.1.3 The vocational training contract

A vocational training relationship is established with the conclusion of a *vocational training contract*, the parties to which are the employer (who is ultimately responsible for training) and the trainee. Such a contract must correspond to the norms of Articles 3–19 of the Vocational Training Act.

'Directly after the conclusion of the vocational training contract, at the very latest before the commencement of vocational training, the employer must record the essential content of the contract in writing' (Art. 4, para. 1).

This document must contain at least the following:

'1. The nature, content and chronological order, also the objective, of the vocational training, in particular the occupation for which training is to be given,

2. commencement and duration of vocational training,

3. training measures outside the training establishment,

4. duration of the regular daily training period,

5. duration of the probation period,

6. payment and amount of remuneration,

7. duration of annual leave,

8. circumstances in which the vocational training contract can be cancelled' (Art. 4, para. 1).

The content and chronological order of the vocational training is determined by the outline training plan (Art. 25, para. 2, item 4) and by an in-firm training plan which takes due account of the peculiarities of the individual undertaking.

The training objective is determined by the nature of the occupation for which training is to be given, also by the skills and knowledge specified in the skilled occupation description. The vocational training relationship begins on the date agreed in the contract by the employer and the trainee. This marks the beginning of the *probationary period*. Training should last not more than three years and not less than two; its duration depends upon the ultimate skilled occupation and is laid down in each individual Training Ordinance (Art. 25, para. 2).

The probationary period is part of the vocational training relationship and must last at least one month but not more than three. Remuneration is governed by Articles 10, 11 and 12 of the Vocational Training Act, but these are only outline regulations. Thus it is primarily the task of the

employer, the trainee and the parties to the collective wage agreement to determine the individual *training remuneration*, especially with regard to the amount. The amount of annual leave has to be expressly laid down in the written contract; the right to annual leave arises from the Young Persons (Protection of Employment) Act, the Federal Leave Act and the relevant collective agreements. During the probationary period the vocational training relationship can be terminated at any time without notice (Art. 15, para. 2). After that period the relationship can be prematurely terminated by giving notice only in exceptional circumstances.

In exceptional cases the vocational training relationship can be terminated by giving notice when there is an important reason (Art. 15, para. 2, item 1) and (here giving four weeks' notice) when the trainee wishes to abandon training or take up training for another occupation (Art. 15, para. 2, item 2).

Immediately following the conclusion of the vocational training contract, the employer must make application for it to be entered in the *register of vocational training contracts* (cf. Art. 33). The register is set up and maintained by the competent body (cf. Art.31).

3.2.2 The legal foundations for vocational training in the (part-time) vocational school (*Berufsschule*)

Under the Basic Law (Articles 30 & 70) the Federal Länder are accorded all the competencies for which the Federal Government cannot prove that it is expressly given responsibility in that law. These competencies of the *Federal Länder* include responsibility for *schools* and therefore for the *Berufsschule*. This means that each Land has its own school laws and laws concerning compulsory education – also for the Berufsschule.

The Standing Conference of the Ministers of Culture (of the Federal Länder), with their decisions and outline agreements,

- which are not, however, automatically binding on the Länder
- ensure a certain uniformity in matters of education).[14]

Despite the efforts of the Standing Conference to achieve uniformity in education, including vocational school education, there are *differences between Berufsschulen in the various Länder* with regard to the number of hours of attendance per week, the subjects and the names given to them, the certificates and, indeed, the curricula. It will be seen that, in contrast to the curricula of the Berufsschulen, which vary from Land to Land, the Training Ordinances governing vocational training on the job, which are based on the Vocational Training Act, are uniform throughout the Federal Republic.

Although the Berufsschule is not, from the legal aspect, actually part of the apprenticeship system and apprenticeship training, it does in fact play an essential part in such training, in particular through its 'special-to-skill' theoretical instruction, to which the major part of instruction time

14 Cf. for example 'Designations of Vocational Schools' of 8 December 1975. See Documentation, No. 1.

in the Berufsschule is devoted. The resultant necessity for improved harmonization of the Training Ordinances and the Berufsschule curricula of the Länder has been recognized for some time.[15]

3.2.3 The legal-administrative structure of the dual system

3.2.3.1 An overview of the legal-administrative structure

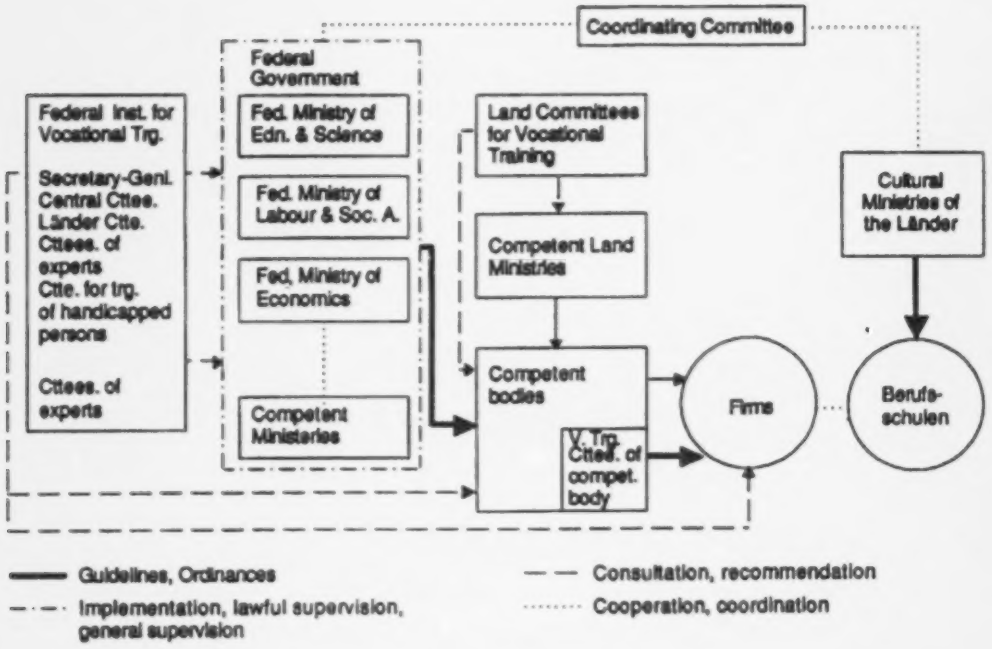
Organizationally, administratively and functionally the dual system of vocational training in the Federal Republic of Germany is a very complicated system. The reasons for this are:

- the federal system of the Federal Republic,
- the various competencies of the Federal Government and the Länder in the field of vocational training,
- the relatively tight network of regulations and controls,
- the combining of state responsibility for initial vocational training with the principle of self-administration,
- the fact that the dual system is embedded, on the one hand, in the publicly-run education system (Berufsschule), and on the other in a market economy with private firms.

The following figure gives an initial synoptic view of the institutions concerned in apprenticeship training and the way in which they collaborate.

15 See p. 141 et seq.

Fig. 10 The legal-administrative structure of the dual system


Coordinating Committee
Federal Government
Federal Inst. for Vocational Trg.
Secretary-Genl. Central Ctte. Länder Ctte. Ctees. of experts Ctte. for trg. of handicapped persons
Ctees. of experts
Fed. Ministry of Edn. & Science
Fed. Ministry of Labour & Soc. A.
Fed. Ministry of Economics
Competent Ministries
Land Committees for Vocational Training
Competent Land Ministries
Competent bodies
V. Trg. Ctte. of compet. body
Firms
Cultural Ministries of the Länder
Berufs-schulen
Guidelines, Ordinances
Implementation, lawful supervision, general supervision
Consultation, recommendation
Cooperation, coordination

3.2.3.2 The competent bodies

3.2.3.2.1 Types and responsibilities

Under the Vocational Training Act the bodies charged with regulating and controlling in-firm training are known as '*competent bodies*'. The VTA lays down which body is responsible for training in particular occupations or occupational areas.

For vocational training in *industrial and commercial undertakings* which are not craft establishments, or similar to these, the *Chamber of Industry and Commerce* (Art. 75, VTA) is responsible; for vocational training in *craft establishments*, or undertakings similar to them, the *Crafts Chamber* is the competent body (Art. 64, VTA).

For training in *agricultural undertakings*, including the home economics side, the competent body is usually the *Chamber of Agriculture*, but not in all cases (Art. 79, VTA).

As regards training in *home economics*, the competent body is determined by the Federal Minister for Labour and Social Affairs by statutory instrument (Art. 93, VTA). Various intermediate administrative bodies (of certain Federal Länder) function in this capacity.

The most varied *Federal and Land authorities* are responsible for vocational training in the *public service* (Art. 84, VTA), while the *appropriate Chambers* are the competent bodies for vocational training for lawyers', patent agents' and notaries' assistants (Art. 87, VTA), assistants in business and tax advisory occupations (Art. 89, VTA), and doctors', dentists' and pharmacists' assistants (Art. 91, VTA).

As corporations under public law the competent bodies are subject to the legal supervision of the supreme Land authority, which is usually the Ministry of Economics or the Ministry of Labour. There is no technical supervision of the competent bodies.

A list of all the competent bodies is given in the index of 'Recognized skilled occupations', 1986 edition, published by the Federal Institute for Vocational Training (BIBB).

3.2.3.2.2 Tasks

Pursuant to Article 44 of the Vocational Training Act, the competent body regulates the implementation of vocational training in firms within the framework of the VTA, in so far as regulations do not already exist.

In detail the competent bodies have the following tasks:

- *supervising* the implementation of vocational training according to Article 45,
- *promoting* vocational training through the counselling of trainers and trainees pursuant to Article 45,
- determining the *suitability* of the training firm under Article 23,
- *shortening the training period* under Article 29, para. 2,
- *extending the training period* under Article 29, para. 3,
- establishing and *maintaining the register of vocational training contracts* according to Articles 31, 33,
- appointing the *examining boards and conducting the final examinations* under Article 36,
- *admitting candidates to the final examination* under Articles 33–40,
- publishing the *examination regulations* under Article 41,
- conducting *intermediate examinations* under Article 41,
- setting up a conciliation committee to deal with disputes between employers and trainees arising from an existing training relationship, pursuant to Article 102 of the Vocational Training Act in conjunction with Article 111, para. 2 of the Labour Court Law.

3.2.3.2.3 *Organization and personnel*

The Chambers of Industry and Commerce and the Crafts Chambers are, as a rule, the competent bodies which have to look after a particularly large number of training relationships (up to 10 000 or more) and the organization and personnel of these bodies reflect the extensive range of tasks resulting from this responsibility. As in the Chambers of Agriculture, there are special *departments for vocational training*, but here it must be borne in mind that the competent bodies are responsible not only for *initial training* but also for *further training* and *retraining*, in accordance with the Vocational Training Act.

3.2.3.3 *The Vocational Training committees of the competent bodies*

3.2.3.3.1 *Organization and composition*

The *Vocational Training Committees* are established by the competent bodies in accordance with Article 56, para. 1 of the VTA and are organs of those bodies. Thus each competent body also has a Vocational Training Committee made up of six employers' representatives, six employees' representatives and six vocational school teachers, with the latter attending in an advisory capacity. 'The employers' representatives are proposed by the competent body, the workers' representatives by the local trade unions and independent associations of workers having social or vocational objectives, and the vocational school teachers by the authority responsible under Land law; all are appointed to membership for a maximum period of four years' (Art. 56, para. 2).

The Vocational Training Committee elects one of its members to serve as Chairman and another as Vice-Chairman. As a rule the chairmanship alternates annually between an employers' representative and a workers' representative.

3.2.3.3.2 *Tasks*

The Vocational Training Committee *is* to be *informed* of all important matters relating to vocational training and its views *heard*.

Important matters of which the Committee is to be informed are, for example:

- the plans of the competent body for the organization and expansion of vocational training,
- the number and type of training relationships,
- labour market developments which affect vocational training,
- new Training Ordinances,
- changes to Training Ordinances,
- results of final examinations,

- new forms and methods of training,

- changes in publicly-run education that could affect vocational training.

Furthermore, on the basis of this law, the Committee has to approve the *legal regulations* for the implementation of vocational training to be issued by the competent body. Thus the Vocational Training Committee of the competent body has not only the right to make recommendations, like the Land Committees, but is also a *decision-making* organ.

An example of the legal regulations for the implementation of vocational training which have to be approved by the Vocational Training Committee is the examination requirements for the final (qualifying) examinations.

Decisions made by the Vocational Training Committee, for the implementation of which the amount apportioned for vocational training in the competent body's current budget does not suffice do not become effective until the organ of the competent body responsible for the budget has given its approval (Art. 58, para. 3, VTA). In the case of the Chambers of Industry and Commerce this is the *plenary assembly*.

Pursuant to Article 44, paras. 2 and 3 of the Crafts Code, the decision-making competence and procedure of the *Vocational Training Committees of the Crafts Chambers* are regulated differently.

Before a decision is made in the plenary assembly concerning regulations for the implementation of vocational training, the opinion of the Vocational Training Committee has to be sought; but the Committee can also submit its own proposals for implementation to the plenary assembly. Reasons have to be given both for opinions voiced by the Vocational Training Committee and for proposals submitted.

The proposals and opinions of the Vocational Training Committee are regarded as having been accepted by the plenary assembly unless they are changed or rejected by a majority of three-quarters of the members at its next sitting. This can result in various modes of procedure, the most frequently practised being the following: the Vocational Training Committee submits to the plenary assembly a proposal for a regulation concerning the implementation of vocational training. At its next sitting the assembly does not reject the decision with a three-quarters majority (Art. 44, para. 3, item 1 of the Crafts Code). In this way a decision made by the Vocational Training Committee becomes effective even though it has not been directly formulated by the plenary assembly.

3.2.3.4 The Land Committees for Vocational Training

3.2.3.4.1 Organization and composition

The *Land Committees for Vocational Training* are made up of equal numbers of representatives of employers, workers and the supreme Land authorities. One half of the representatives of the Land authorities must be experts in the field of education (Art. 54, para. 1, VTA). The Land

Committees draw up rules of procedure which require the approval of the Land Government or the supreme Land authority designated by it. The rules can provide for the setting up of sub-committees, membership of which is not restricted to members of the Land Committee (Art. 54, para. 4, VTA).

Some Land Committees for Vocational Training have a representative of the Land Employment Office as an advisory member.

As a rule the Land Committees are managed by the Land Ministries responsible for vocational training in industry and commerce. With one or two exceptions this is either the Ministry of Labour or the Ministry of Economics. In Bavaria the Ministry of Economics is responsible for initial vocational training in industry, commerce and the crafts, but the Ministry of Labour is responsible for the management of the Land Committee for Vocational Training. In the Saarland the Land Committee is managed not by the Ministry of Economics but by the Ministry of Culture.

3.2.3.4.2 Tasks

It is the task of the Land Committees to *advise* the Land Government concerned on all vocational training questions arising within that Land.

Above all, in the interest of uniform vocational training they have to work towards coordination of school-based and on-the-job vocational training and ensure that due attention is paid to training in the reorganization and further development of education (Art. 55, VTA).

Since legislative competence for educational matters rests with the Länder and responsibility for on-the-job training with the Federal Government, the Land Committees for Vocational Training represent a *coordinating instrument* at Land level. But their function is purely to *advise and recommend*, therefore their recommendations are not binding upon those to whom they are addressed.

The effectiveness of the recommendations made by the Land Committee depends not only upon their substance and balance but also on the extent to which the Ministry which manages the affairs of the Committee has identified itself with the recommendation. If there is full agreement on the content then the Ministry can, by expressly approving the recommendation, lend special weight to it. If this is not the case then, as a rule, the recommendation is merely forwarded to the addressee or addressees. In evaluating the recommendations the Ministry also takes into account whether they were unanimously approved or merely passed with a small majority.

3.2.3.5 The competent Länder Ministries

Although legal competence for apprenticeship training basically rests with the Federal Government, the Länder and their supreme authorities (Ministries) also have certain tasks to perform in connection with vocational training.

With two exceptions (Hamburg and Lower Saxony), either the Minister of Labour or the Minister for Economics is responsible for these various tasks in industry, commerce and the crafts. In Hamburg an 'Authority for schools, youth and vocational training – Office for vocational and further training' was created, which has combined responsibility for both the Berufsschule (and other vocational schools) and apprenticeship training. In Lower Saxony the Ministry of Culture is responsible for vocational training. Taking the Rhineland Palatinate (Ministry of Economics and Transport) as an example, we can see the kind of *tasks* and *competencies* that fall to the responsible Land Ministry in vocational training matters:

- The Ministry exercises *lawful supervision* over the competent bodies of industry, commerce and the crafts (Chambers of Industry and Commerce, Crafts Chambers). That is to say the Ministry ensures that these bodies observe the relevant legal bases and regulations when organizing, implementing and controlling vocational training. With an increasingly comprehensive network of legal regulations, lawful supervision also assumes, to some extent at least, the nature of technical supervision.

- The Ministry is responsible for the *financial promotion* of vocational training throughout the Land. Examples of such financial promotion measures are investment subsidies for group training workshops and grants for 'Training of trainers' courses.

- The Ministry is responsible for the *management of the Land Committee for Vocational Training.*

- The Ministry is *involved* in issuing curricula for the Berufsschulen, these being approved by the Ministry of Culture in agreement with the Ministry of Economics.

- Within the framework of its lawful supervision the Ministry *approves* the *examination regulations* of the competent bodies.

- The Ministry (acting on recommendations) appoints the *members of the Vocational Training Committees* of the bodies competent for apprenticeship training in industry, commerce and the crafts.

3.2.3.6 The competent Federal Ministries

The competencies of the Federal Ministries concerned with vocational training are regulated by

- an act to adjust competencies dated 18 March 1975 (Official Gazette I, p. 705) (**Zuständigkeitsanpassungsgesetz**),

- the Federal Chancellor's decree on organization dated 15 December 1973.

Pursuant to these, *general and coordinating* competence in vocational training matters rests with the *Federal Ministry for Education and Science.*

This means that the Ministry has the following tasks:

- *central responsibility* for the *Vocational Training Act*,
- *responsibility* for *basic questions of vocational training policy*,
- *responsibility* for the *Federal Institute for Vocational Training*[16],
- direct responsibility for the *publication of statutory instruments* concerning *further vocational training* and the *pedagogic qualifications of trainers*.

The *competent Ministries* are *responsible* for the *recognition of skilled occupations* through the publication of Training Ordinances, also the publication of statutory regulations concerning countability (towards the period of vocational training) and assimilation (e.g. the Federal Ministry of Economics for occupations in industry, commerce and the crafts, the Federal Ministry of Food, Agriculture and Forestry for occupations in agriculture and rural home economics, and the Federal Ministry of Labour and Social Affairs for urban home economics).

These Ministries, however, can publish such regulations only *in agreement* with the Federal Ministry of Education and Science, therefore that department, too, exercises a decisive influence on these aspects of vocational training.

*3.2.3.7 The Federal Institute for Vocational Training (**Das Bundesinstitut für Berufsbildung – BIBB**)*

3.2.3.7.1 Organization

The Federal Institute for Vocational Training is an authority capable of acting as a legal entity and is directly accountable to the Federal Government; it comes under the supervision of the Federal Minister of Education and Science. The legal bases for the task, structure and working method of the Institute are Articles 6–18 of the Vocational Training Promotion Act of 23 December 1981.

The organs of the Institute are:

1. the Central Committee
2. the Secretary-General.

The *Central Committee* decides upon the affairs of the Federal Institute for Vocational Training in so far as these have not been made the responsibility of the Secretary-General. It comprises eleven representatives each of employers, workers and the Länder, together with five members nominated by the Federal Government; the latter have eleven votes, which can be cast only in uniformity. One representative of the Federal Institute of Labour (**Bundesanstalt für Arbeit**)

16 Cf.: Amendments to the Vocational Training Act effected by the act to adjust competencies dated 18.3.1975.

and one from the central communal associations at Federal level can attend the meetings of the Central Committee in an advisory capacity.

The *Secretary-General* represents the Federal Institute for Vocational Training in and out of court. He administers the Institute and is responsible for the implementation of its tasks. To the extent that he does not have to observe the directives and general administrative regulations of the competent Federal Minister, he carries out the tasks in accordance with the guidelines laid down by the Central Committee. The Federal President, acting upon the recommendation of the Federal Government, appoints the Secretary-General, who is given the status of civil servant.

A permanent sub-committee of the Central Committee is the *Länder Committee*, whose special task it is to work towards harmonization of the Training Ordinances and the outline school curricula of the Länder, as far as this devolves upon the Institute. The Länder Committee is composed of one representative from each Land and three representatives each from the Federal Government, the employers, and the workers. A representative of the Federal Institute of Labour may also attend meetings of this committee in an advisory capacity.

For guidance in performing individual tasks the Secretary-General can, under the detailed provisions of the statute, appoint *committees of experts*.

These committees should consist of persons well versed in the problems of vocational training, especially teachers, and, depending upon the tasks of a particular committee, trainers and trainees as well.

A *Committee for the vocational training of disabled persons* advises the Federal Institute on its tasks in this field and this consists of seventeen members appointed by the Secretary- General.

3.2.3.7.2 Tasks

The Federal Institute for Vocational Training has the following tasks:

- collaborating in the preparation of Training Ordinances and the Vocational Training Report,
- collaborating in assembling vocational training statistics,
- supporting the planning, establishment and further development of group training workshops,
- advising the Federal Government on vocational training matters,
- carrying out vocational training research in accordance with the programme decided by the Central Committee,
- monitoring of pilot projects,
- maintaining and publishing the index of recognized skilled occupations,

- examining and recognizing distance learning courses and advising the organizers of distance learning courses for vocational training.

*3.2.3.8 The Federal Institute of Labour (**Die Bundesanstalt für Arbeit**)*[17]

3.2.3.8.1 Organization

The organization and tasks of the Federal Institute of Labour are regulated in the Employment Promotion Act (**Arbeitsförderungsgesetz**) of 25 June 1969. It is an indirect Federal corporation under public law with the right of self-administration and has its seat in Nuremberg (Art. 189, para. 1). It consists of a Central Office, Land Employment Offices and local Employment Offices. At present there are nine Land Employment Offices, just under a hundred and fifty Employment Offices and over five hundred and fifty branch offices. The organs of the Federal Institute are:

1. the Administrative Board,
2. the Management Board,
3. the Administrative Committees of the Land Employment offices,
4. the Administrative Committees of the Employment Offices (Article 190).

All organs of the Federal Institute are composed of equal numbers of employers' representatives, workers' representatives and representatives of the public corporations (Art. 192, para. 1) In accordance with Art. 191, the organs assert the right of self-administration for their particular field. Their tasks and powers derive from the law mentioned above and from the Statute decided by the Administrative Board of the Federal Institute (Art. 214). Day-to-day administrative business is the responsibility of the President of the Federal Institute (Art. 209), acting in accordance with the guidelines drawn up by the Management Board, which is the executive organ of the Institute. To raise the funds needed for carrying out its tasks the Federal Institute levies contributions from employers and workers, the amount being the same for both (Art. 167).

3.2.3.8.2 Tasks

The tasks of the Federal Institute follow from Art. 3 of the Employment Promotion Act and are carried out 'within the framework of the social and economic policy of the Federal Government' (Art. 3, para. 1). They are:

- *vocational guidance,*
- placement,

17 This institution, which is of overall importance, is not taken into account in the legal-administrative structure of the dual system (Fig. 10, p. 76) since it is not part of that system. On the other hand, there are very important points of contact, such as vocational guidance and employment research.

- *promotion of vocational training*,
- *vocational promotion of the handicapped* (vocational rehabilitation),
- the granting of funds to maintain and create jobs,
- payment of unemployment benefit,
- payment of supplementary benefit.

In addition the Federal Institute conducts *employment research* and to this end has its own Institute for Employment Research (subordinate authority), based at Nuremberg.

3.2.4 Cooperation between employers and workers in the dual system

3.2.4.1 Introduction

Employers and workers, also their organizations (employers' associations and trade unions) are naturally greatly interested in vocational training and in influencing its organization and implementation.

The legislature has taken this into account and ensured that in all institutions and committees concerned with training employers and workers have *parity* of representation, and that their views carry more or less equal weight.

In the following pages the way in which representatives of employers and workers cooperate in the relevant institutions and committees will be described in detail, particular attention being paid to their overall proportional participation, their numerical relationship to each other and the ways in which they can collaborate.

3.2.4.2 Cooperation within the firm

The right of workers' representatives to be heard in on-the-job training matters, including initial training, is laid down in the Works Constitution Act of 15 January 1972. As already mentioned in another context, this act attaches considerable importance to on-the-job training and the participation of the works council in the promotion and implementation of in-firm training measures. The most important provisions (I) are contained in Articles 70, 90, 92, 96, 97 and 98 of the Works Constitution Act. Pursuant to these the employer must, among other things,

- discuss matters concerning the vocational training of the firm's employees with the works council when that body so requests (Art. 96),
- discuss the setting up and equipment of in-firm training facilities with the works council (Art. 97),

The works council has the right of codetermination in the implementation of measures for on-the-job vocational training (Art. 98). It can oppose the appointment of a person charged with the implementation of on-the-job training or demand his removal (Art. 98). Under Article 70 of the Works Constitution Act the youth delegation is required, among other things, to

- make application to the works council for the introduction of measures which would serve the interests of young employees,

- ensure that the laws, ordinances, safety regulations, collective wage agreements and internal agreements which benefit young employees (and thereby trainees also) are implemented.

3.2.4.3 Cooperation in the Committees for Vocational Training

In all the *Committees for Vocational Training* as prescribed in the Vocational Training Act, namely:

- the Land Committees for Vocational Training (Articles 54 & 55),

- the Vocational Training Committees of the competent bodies (Articles 56–59),

employers and workers have *parity* of representation and, in total, outnumber all other members put together.

In the case of the Land Committees these are the representatives of the supreme Land authorities, and in the Vocational Training Committees of the competent bodies they are the vocational school teachers attending in an advisory capacity.

In these committees the Chairman is normally a representative of the employers or workers, for the most part alternating annually.

Whereas the functions of the Land Committees for Vocational Training are purely to advise and make recommendations (vis-à-vis the Land Government) the Vocational Training Committees of the competent bodies are decision-making organs. Thus, in accordance with Art. 58, para. 2 of the Vocational Training Act, they have to decide upon the legal regulations for the implementation of vocational training to be issued by the competent body.

It will be seen, therefore, that the employers' and workers' representatives carry considerable weight in the Committees for Vocational Training.

3.2.4.4 Cooperation with the competent bodies

Despite parity of representation in the Vocational Training Committees of the competent bodies, the employers' representatives are potentially in a stronger position than those of the workers here.

This derives from the organization of the competent bodies (where these are Chambers) and from Art. 58, para. 3 of the VTA, under which decisions made by the Vocational Training Committees of these bodies, for the implementation of which the monies provided for vocational training in the current budget do not suffice, require the approval of the organs responsible for the budget before they can be put into effect. In the case of the Chambers these organs are the plenary assemblies and (with the exception of Crafts Chambers, where journeymen's representatives make up one third of the plenary assembly) these consist exclusively of employers' representatives. Thus any decisions made by the Vocational Training Committees which involve expenditure can be not only changed by those organs of the Chambers in which there is no parity of representation but also rendered invalid.

3.2.4.5 Cooperation in the examining boards

The examining boards consist of equal numbers of representatives of employers and workers, together with a vocational school teacher. Under Article 37, para. 1 of the Vocational Training Act an examining board must consist of at least three members; it can, of course, have more but representatives of employers and workers must always have numerical parity (Art. 37, para. 2, VTA) although, in the latter case, the requirements of the VTA are met if only one teacher from the Berufsschule is included. Thus, from the numerical aspect, representatives of employers and workers are also in a strong position in the examining boards. As the chairman of an examining board is elected from among the members (Art. 38, para. 1, VTA), in practice the chair is taken by an employers' or workers' representative, more rarely by a Berufsschule teacher.

3.2.4.6 Cooperation in the Federal Institute for Vocational Training

Pursuant to Article 8 of the Vocational Training Promotion Act of 23 December 1981, the Central Committee of the Institute is composed of eleven representatives each of employers, workers and the Länder, together with five representatives of the Federal Government. A member of the Central Committee is elected Chairman for a period of one year, nominations being made in turn by the representatives of the employers, the workers, the Länder and the Federal Government.

Since the Central Committee decides all the affairs of the Federal Institute for Vocational Training other than those which are the responsibility of the Secretary-General, it will be seen that both employers and workers can exercise considerable influence upon the implementation of the tasks of the Institute.

3.2.4.7 Cooperation in the Federal Institute of Labour

All the organs of the Federal Institute, namely

- the Administrative Board,

- the Management Board as the executive organ,
- the Administrative Committees of the Land Employment Offices,
- the Administrative Committees of the local Employment Offices,

are composed of *equal* numbers of voting representatives of the employers, the workers and the public corporations. All organs make their decisions by majority vote (cf. in detail Articles 189–206 of the Employment Promotion Act).

In addition to this cooperation which is laid down and regulated by law there are numerous other bodies, discussion circles and so on where employers and workers jointly deal with vocational training matters. Examples of these are:

- the central committee and local sub-committees of the graphics/printing industry,
- the discussions between managerial staff and members of works councils in compliance with the Works Constitution Act,
- discussions between experts from employers' associations and the German Trade Union Federation at Land and Federal level and
- the discussions between employers' organizations and trade unions in which, as a preliminary step to the development of new Training Ordinances, joint objectives or 'key data' are laid down for vocational training.

3.3 The dual system from the vocational pedagogic aspect

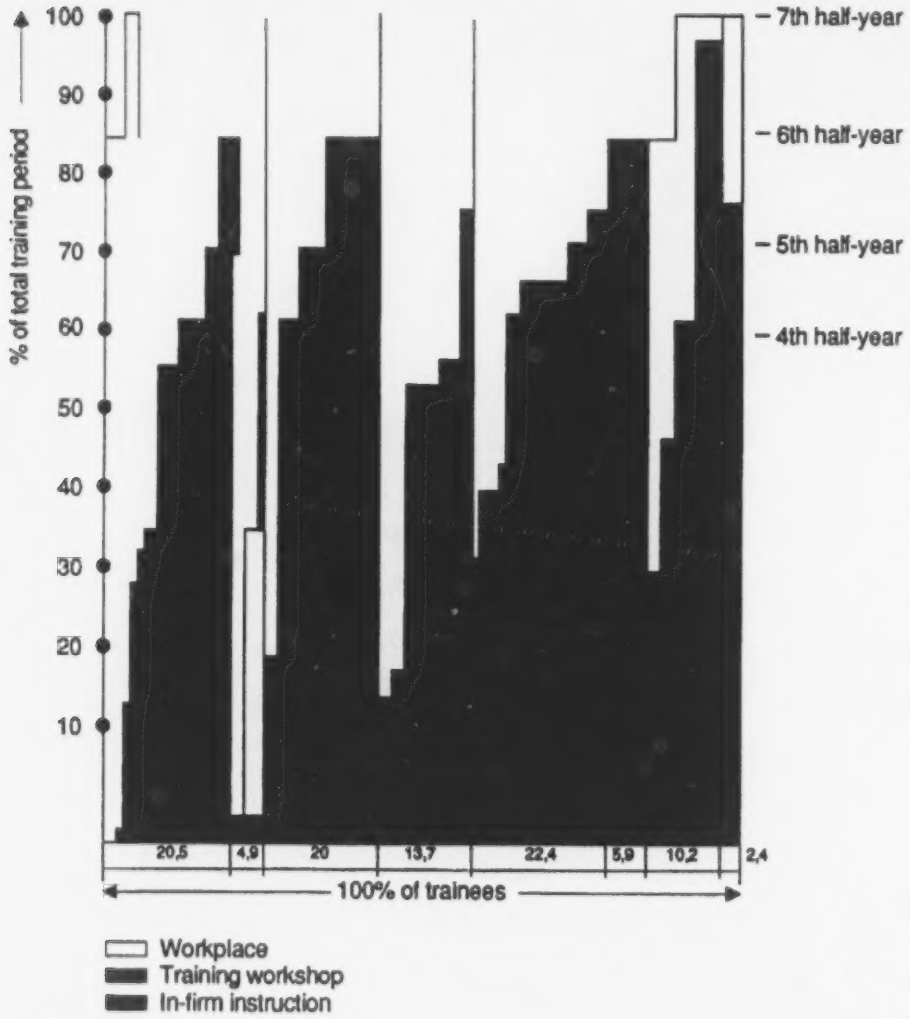
3.3.1 The firm and the Berufsschule as cooperative providers of learning venues

When examining the dual system from the *vocational pedagogic aspect*, the learning venues used to impart vocational qualifications are of central interest, irrespective of their legal status. In the wider sense, every place where learning processes occur is a learning venue. In the narrower sense the learning venue represents a structure of conditions, both material and immaterial, for the *purposeful organization of learning processes*. And here it must be presumed that some venues are better suited than others for achieving the intended learning and training objectives, and that for more complex training aims – such as the qualification of skilled workers – *cooperation between various learning venues* contributes towards optimization of the training results.

So we see that from the aspects of *learning venue theory* and *vocational pedagogics* the dual system is not a dual but a *plural* system. That is to say, training within the framework of the dual system is based on more than two learning venues, i.e. not only on those of *firm* and *Berufsschule*, for these are not uniform venues but *providers of quite diverse learning venues*. Thus in the firm we find, in addition to the learning venue of the *workplace* (place of production), those of the *workshop* and *in-firm instruction*. In the Berufsschule we have not only the learning venue of the *classroom* but also that of the *workshop* – indeed variants of the latter such as teaching

and demonstration workshops. So, as regards learning venues, and combinations of these, it will be seen that the dual system is extremely diverse. Taking as a random sample the recognized skilled occupation of engineering fitter-machinist, the following diagram illustrates the in-firm learning venues.

Fig. 11 Time spent by the trainee in one learning venue[18] as a percentage of the total training period occupation: engineering fitter-machinist



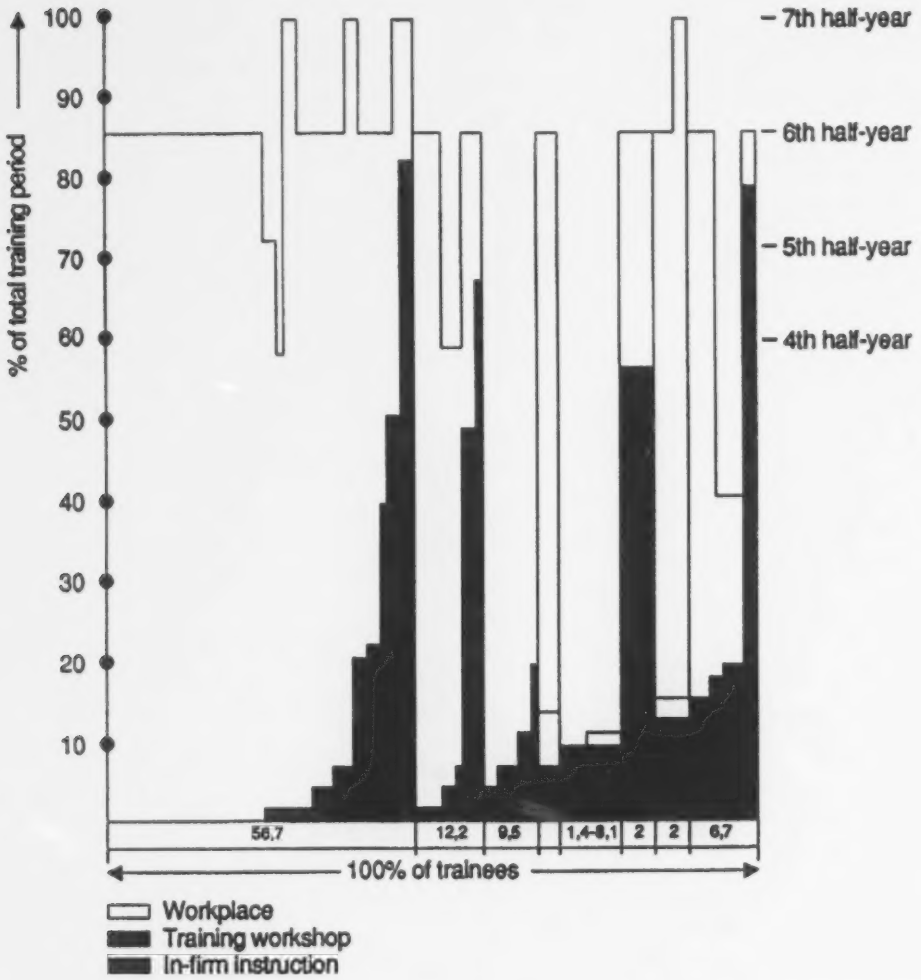
18 From: Münch, J. and others:
Interdependenz von Lernort-Kombinationen und Output-Qualitäten betrieblicher Berufsausbildung in ausgewählten Berufen, Berlin 1981, p. 86.

It can be seen that only just under 4% of the trainee engineering fitter-machinists learn their trade exclusively at the workplace. But there are also trainees who qualify only through the training workshop and in-firm instruction, indeed about 1.5% of trainees through the training workshop alone. Which learning venues are used, and to what extent, can also depend upon the size of the training firm.

In recognized skilled occupations for which training is given mainly or exclusively in small firms, the workplace is manifestly the main learning venue, as illustrated by the occupation of dispensing optician in the following diagram.

Fig. 12 Time spent by the trainee in one learning venue[19] as a percentage of the total training period

occupation: dispensing optician



This shows, among other things, that 56.7% of all the trainee dispensing opticians questioned received no in-firm instruction. About 32.0% of those covered by the survey learnt exclusively at the workplace.

19 From: Münch, J. and others, loc. cit., p. 337

3.3.2 The in-firm learning venues

3.3.2.1 The workplace as a learning venue

It has been shown that learning within the firm is not always identical with learning in an actual work situation on the shop floor. The example of the skilled occupation of engineering fitter-machinist showed that technicalization and rationalization of certain working and learning environments in industry manifestly reduce the time spent learning at the workplace in technical-industrial occupations. Recent studies[20] have shown, however, that for industrial vocational training the workplace must still be regarded as important to a certain extent. Only in exceptional cases does it appear to be advantageous to train young people exclusively in a training workshop. The example of the skilled occupation of dispensing optician showed that in small firms training at the workplace – measured in terms of time – predominates. The extent to which the workplace as a learning venue also meets the qualitative requirements of modern, comprehensive vocational training depends upon its individual character. The opportunities for developing the didactic and pedagogic potential of the workplace as a learning venue through intensification of the direct tuition process on the shop floor and a substantial amount of unproductive work (for practice) are particularly good in surroundings where the work and learning processes are neither overwhelming in scale nor governed by pressure of time. These conditions are found in a whole series of occupations (such as dispensing optician) and firms, but not in all. Empirically supported *typology of the workplace as a learning venue* according to the degree of pedagogic value is yet to come. Hypothetically the following differences emerge[21]:

a) Workplaces with a *vocational pedagogic function*:
All workplaces at which learning processes take place, although this aspect is not a factor in their selection or organization. But in working conditions largely determined by division of labour, technicalization and pressure of time these workplaces may not, or only partially, fulfil their pedagogic function.

b) Workplaces having *vocational pedagogic intentionality*:
Workplaces selected according to vocational pedagogic criteria with regard to

- *volume of work* (quantitative and qualitative: for example the skills to be acquired or the operations to be performed must occur in sufficient numbers and be suitably diverse)
- *technical equipment*
- personnel

c) *Workplaces designed for vocational pedagogic purposes*:

- volume of work controlled for vocational pedagogic purposes
- no time limit (or a pedagogically-directed limit) for work to be performed

20 Münch, J. and others, loc. cit.

21 Cf. Münch, J./Kath, F.M.: Zur Phänomenologie und Theorie des Arbeitsplatzes als Lernort. In: Münch, J. (Pub.), Lernen aber wo? Der Lernort als pädagogisches und lernorganisatorisches Problem, Trier, 1977.

- training personnel with special aptitude and training, both technical and pedagogic
- special safety measures
- special auxiliary devices (servo-mechanisms)
- planned and purposeful incorporation in the overall curriculum.

Selection and use of workplaces as learning venues in accordance with the criteria mentioned here is still relatively rare, but the provisions of the Vocational Training Act do provide indirect control in that trainees may be employed only if the training establishment is suitable, with regard to type and equipment, for vocational training (Art. 22, para. 1, VTA).

In particular, it must be ensured that the knowledge and skills prescribed in the Training Ordinance can be imparted in full.

3.3.2.2 The in-firm training workshop as a learning venue

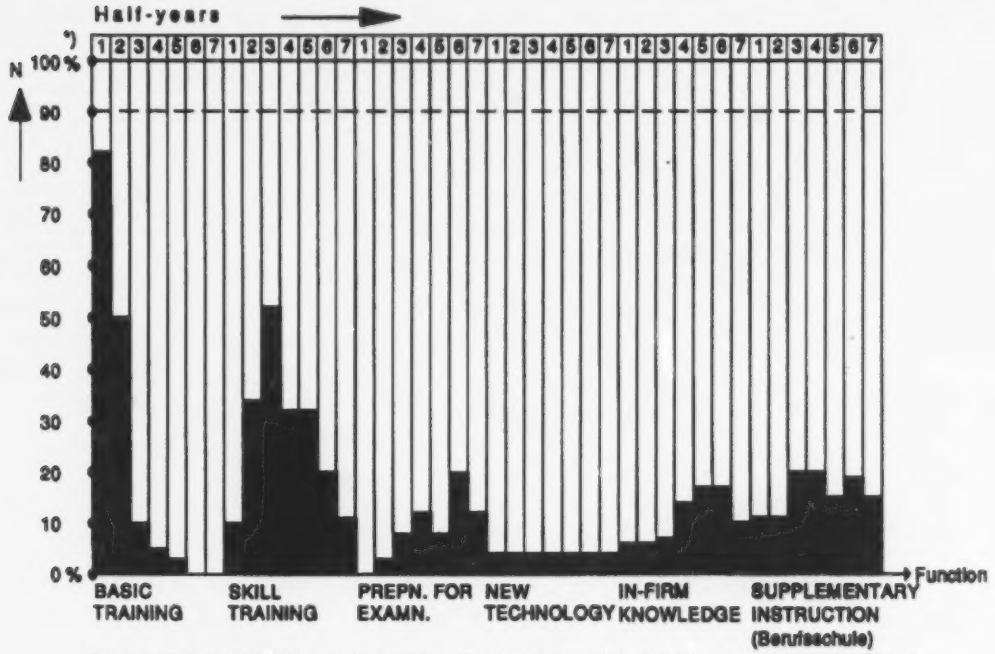
In big industry, particularly, it is becoming increasingly difficult to find workplaces within the production process which allow full and systematic vocational training to be given. This is due, among other things, to the very pronounced division of labour, the high degree of technicalization of production (mechanization, automation, computer-controlled systems), and concentration on the production of a few (similar) products.

According to the Vocational Training Act (Art. 1, para.2), vocational training 'must impart broadly-based basic vocational training and the specialized knowledge and skills needed to practise a skilled occupation, in a systematic course of training. Furthermore, it must provide opportunity for acquiring the necessary occupational experience.' Therefore when the knowledge and skills cannot be imparted in full in the course of the production process, i.e. at the workplace learning venue, the *establishment of training workshops* is not only the outcome of free vocational pedagogic deliberations but a *legal requirement* resulting from the passing of the Vocational Training Act in 1969. But most large undertakings were running their own training workshops, laboratories or offices, at their own expense, before this act was passed.

The time spent by the trainee in an in-firm training workshop varies from firm to firm and according to the occupation for which he is being trained.[22] In some cases training is carried out in the training workshop throughout the entire period of apprenticeship. Some vocational teachers and training experts regard this as problematical, for only exceptionally can the demands of the workplace be realistically simulated in training workshops. The functions of the training workshop as a learning venue are shown in the following diagram, percentage use made of venues by the firms questioned being given without regard to the duration of use.

22 Cf. Fig. 11, p. 97 and Fig. 12, p. 98. From: Münch, J. and others; loco citato, p. 81

Fig. 13 Functions of the learning venue training workshop for the occupation of engineering fitter-machinist



*) N=42 undertakings; 90% use the learning venue 'training workshop' (–) to a greater or lesser degree

In a sample of 42 firms, 90% made use of the training workshop venue to a greater or lesser degree. It will be seen that they are used by most firms for basic training in the first and second half-years of apprenticeship, but also for the second to fifth half-years of skill training; this is mainly the case when the workplace, normally the primary learning venue for skill training, is little used, since workplaces suitable for such training are limited in number.

Training for the occupation of engineering fitter-machinist[23] lasts three and a half years and it is understandable that in the sixth half-year, particularly, considerable attention is given in the training workshop to preparation for the qualifying examination.

Because of the smaller size of the undertakings and, consequently, the small number of apprentices per firm, there are few in-firm training workshops in the crafts. The total for the entire Federal Republic is probably under fifty at present.

The following table gives a survey of the numbers of in-firm training workshops in industry.

23 Under the Regulation governing industrial metal-working occupation, dated 15 January 1987, this occupational title will no longer exist. Cf. Federal Law Gazette, Section I, 24 January 1987, No. 6, p. 274 et seq.

Tab. 18 Number of in-firm and group training workshops for metal and other occupations in industry (KWB survey)[24]

Land	Number of training firms	Number of training workshops in-firm		group	
		Metal	Other occns.	Metal	Other occns.
Schleswig-Holstein	1.266	63	15	4	–
Hamburg	871	78	22	–	2
Lower Saxony	2.221	282	86	1	–
Bremen	473	50	10	–	–
N. Rhine-Westphalia	8.694	676	157	20	6
Hessen	2.915	261	62	7	1
Rhineland Palatinate	995	135	22	15	4
Baden-Württemberg	5.625	602	85	6	3
Bavaria	4.266	374	120	3	1
Saarland	597	63	1	2	1
Berlin	643	38	9	1	1
FRG	28.526	2.622	589	59	19

Every training workshop, including the in-firm variety, is, organizationally and didactically, very similar to a school. Like the school, the workshop is a sheltered place providing planned, purposeful teaching; the instructors are mainly or exclusively teachers and the results of the learning process are systematically controlled and evaluated. While this is, on the one hand, intentional, on the other there are dangers such as the trend towards remoteness from practice, 'too school-like instruction', which become particularly great when the training workshop becomes the dominant learning venue and the workplace has only a subordinate role, or none at all. However, viewed overall, and in the majority of undertakings, the training workshop is an essential learning venue, partly to complement and partly to replace the venue of the workplace; it can be safely assumed that the number of in-firm training workshops in the Federal Republic of Germany will increase even further.

24 From: The Federal Minister for Education and Science (pub.): Analysis of in-firm and group training workshops in the Federal Republic of Germany, Bonn 1975. The data are based on a survey made by the Kuratorium der Deutschen Wirtschaft für Berufsbildung (KWB) (Curatorium for vocational training of German industry) in 1971 which covered all training firms having (a) training workshops, (b) at least one full-time trainer, and (c) at least ten trainees. More recent data are not available.

3.3.2.3 In-firm instruction as a learning venue

A large number of training firms make use not only of the workplace and training workshop as learning venues but also *in-firm instruction* – often quite extensively. We must differentiate between this kind of instruction and that given at the workplace or the training workshop and regard it as a separate venue. This is instruction systematically organized by the firm but quite distinct from the practical training, which usually imparts more complex knowledge and skill than can be acquired at the actual training place or workplace.

The following tables give an overview of the proportion of time devoted to in-firm instruction[25]:

Tab. 19 Number of firm shown according to time spent on in-firm instruction (Engineering fitter-machinist)

Training phase	Time spent on instruction: no in-firm instruction	Hours per month: 1-10	Hours per month: over 10	No. of firms
First year	20	12	10	
Second year	16	15	11	42
Third year	17	14	11	
Fourth year	25	9	8	

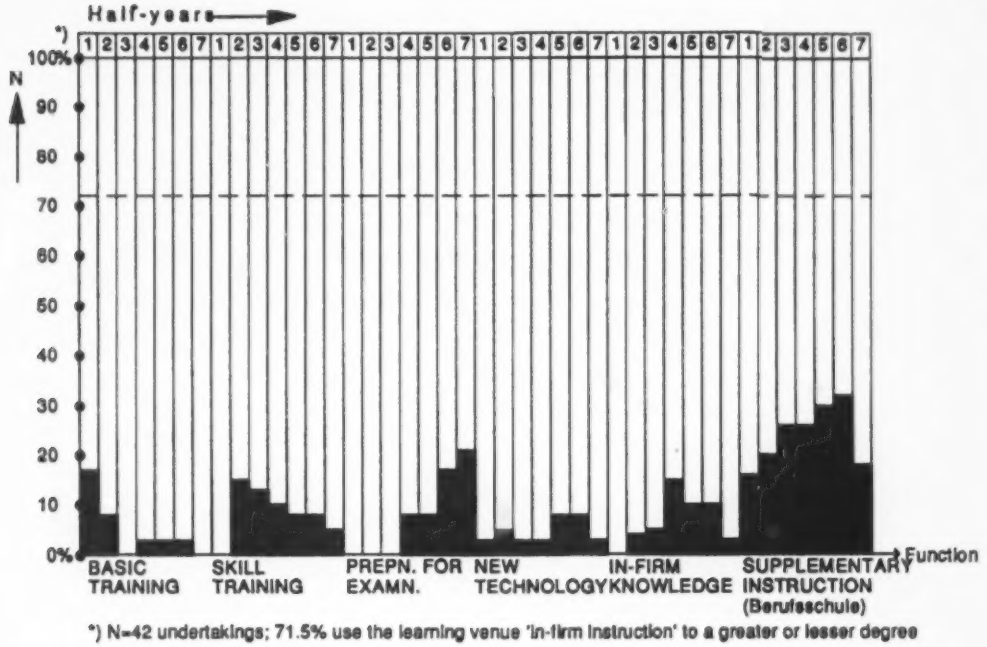
Tab. 20 Number of firms shown according to time spent on in-firm instruction (Opthalmic optician)

Training phase	Time spent on instruction: no in-firm instruction	Hours per month: 1-10	Hours per month: over 10	No. of firms
First year	39	11	12	
Second year	39	14	9	62
Third year	39	15	8	

Clearly in-firm instruction plays a particularly important part in training for industrial skilled occupations and one factor here may be that firms providing such training are, in the main, large concerns. Where there are a large number of trainees then, quite apart from considerations and necessities of vocational teaching, it is easier and probably more economical, to give in-firm instruction.

25 From: Münch, J. and others, loc. cit., pp. 78 and 330.

Fig. 14 Functions of the learning venue in in-firm instruction for the occupation of engineering fitter-machinist

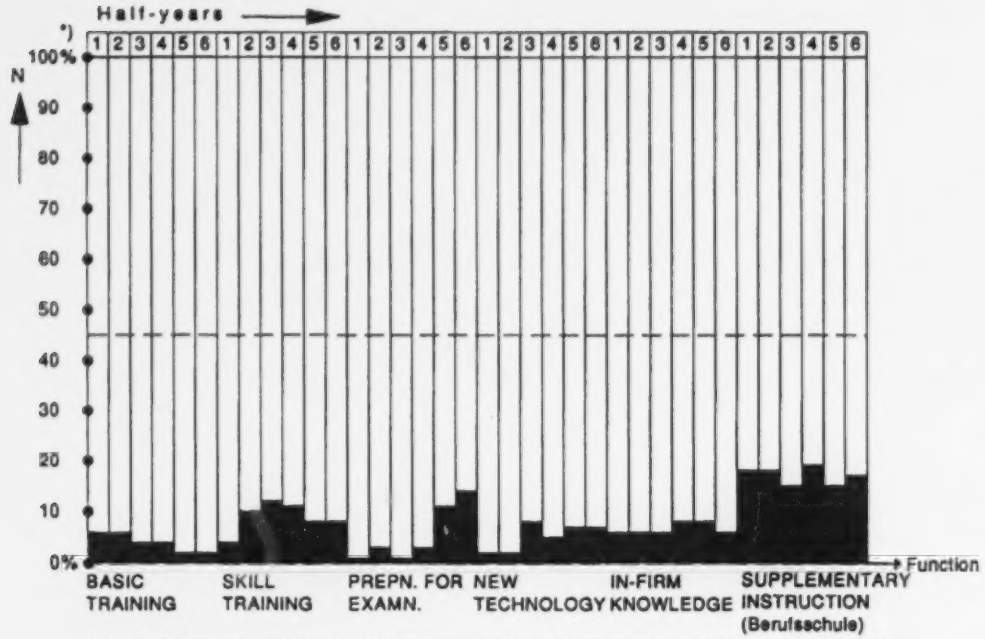


*) N=42 undertakings; 71.5% use the learning venue 'in-firm instruction' to a greater or lesser degree

In the larger firms this closely resembles instruction in the Berufsschule. Like the workplace and training workshop venues, in-firm instruction fulfils not just *one* didactic function but several, albeit to differing degrees. In the foreground is the function of supplementing and amplifying the curricular content of the Berufsschule, together with preparation for the qualifying examination, as may be seen from the following diagram.[26]

26 From: Münch, J. and others, loc. cit., pp. 81 and 332.

Fig. 15 Functions of the learning venue in-firm instruction for the occupation of dispensing optician



*) N=62 undertakings; 45% use the learning venue 'in-firm instruction' to a greater or lesser degree

3.3.2.4 . Variants of in-firm combinations of learning venues

From this account of the most important learning venues (workplace, training workshop, and in-firm instruction) found within the framework of on-the-job training it can be seen that initial training in the training firms of the Federal Republic is extremely varied. While there are many firms which train exclusively through the learning venue 'workplace', if we take on-the-job training as a whole we find that *plurality of learning venues* is dominant. There are very many firms which make use not only of the workplace but also the training workshop and in-firm instruction. In other words, we find among these firms a great variety of *learning venue combinations*, showing great diversity with regard both to the type of venue and the time spent there. In fact every firm makes use of its own combination of venues, not only for reasons of vocational teaching but possibly because of economic and entirely pragmatic considerations. Recent studies[27], however, do confirm that despite this wide spectrum of variations there are typical combinations which result, in particular, from the size of the firm and the nature of the ultimate skilled occupation.

27 Cf. Münch, J. and others, loc. cit.

3.3.2.5 The influence of in-firm learning venue combinations on the training results

The assumption that there is a correlation between the venue combinations used and the results of training has been confirmed by the study already mentioned.[28] For this the result of training was multi-dimensionally defined and differentiated as follows:

- *examination-related competence* as an expression of the results achieved by the trainees in the final (qualifying) examination,
- *occupation-related competence* as an expression of capability in firms of various sizes in different branches,
- *firm-related competence* as an expression of skilled qualification and performance in the worker's own firm,
- *democracy-related capacity* as the extent of ability and readiness to apply democratic principles and modes of behaviour in the worker's own occupation and the working world generally,
- *further-training-related capacity* as a yardstick for the ability and readiness to seek further education and training.[29]

This analysis of the correlation between learning venue combinations on the one hand and training results on the other has shown that a certain combination is not necessarily advantageous or disadvantageous for training in *every* occupation. But the investigation did, above all, show that various learning venue combinations (venue-structure-types) within an occupation do produce different training results. In other words there are, within occupations, more or less *optimal combinations*. The study revealed typical effects brought about by using the venues forming the combinations. Thus the *workplace* conduces, in particular, *firm-related competence*, while the *training workshop* proves to be a learning venue which primarily promotes *examination-related*, *democracy-related* and *further-training-related* capacity. Examination-related competence is also greatly fostered by *in-firm instruction*, which also contributes to firm-related and further-training-related capacity.

The results of this study, here considerably shortened and simplified, are an indication that vocational training can also be improved by changes in, or approximation of, learning venue combinations, due regard being paid to occupation-specific conditions.

3.3.3 The group training workshop as a learning venue

Where training firms are not in a position to run their own training workshops (because they have too few trainees, for example) we often find *group* training workshops. This is especially true of the crafts, firstly because craft establishments are, on average, small and unable to

28 Cf. Münch, J. and others, loc. cit.

29 This is a very brief summary; cf. Münch, J. and others, loc. cit., p. 15 et seq.

maintain workshops of their own and, secondly, the training workshop is regarded as an essential supplement to the workplace venue in the crafts, too, even though the importance attached to it does vary from one occupation to another. But these are not the only motives for the establishment of group training workshops and the big expansion over recent years in the number of places they provide.

A systematic survey of the tasks the group training workshops are set, or which they set themselves, gives us the following list:

- The *quality* of vocational training is to be *ensured* by the systematic nature and completeness of training.
- The *differing training standards* of individual firms are to be *offset* by imparting occupational-field-related techniques.
- *Regional disparities* in the provision of training places are to be *reduced* by stabilizing the number of places available.
- The *number of training places* available, especially in regions with a monostructural economy, is to be *assured long-term* and greater variety ensured.
- *On-the-job training* is to be *supplemented* and *supported* by consolidating and amplifying what has been learnt on the shop floor.
- As many young people as possible are to be given *systematic basic training* to promote mobility.
- *Skill training* is to be intensified, having regard to technical progress. Additional training facilities required at short notice are to be provided.
- Promotion measures are to assist less theoretically-minded young people acquire a vocational qualification and so facilitate their integration into working life.

We can see at a glance, and without a detailed analysis of this list, that it is apparent that the establishment of group training workshops does not follow from vocational teaching considerations alone, that is to say optimization of the vocational learning process. Underlying this is the effort to provide training places outside the competence of individual firms because there are not enough overall, or in a particular region. This as yet undecided instrumental function of the group training workshops, their tendency towards independence as a learning venue *alongside* the dual system, and their heavily promoted expansion in recent years has led to some controversy. Employers' representatives, for example, argue that group workshops should have an exclusively subsidiary *supplementary function* in *on-the-job training*, that is vis-à-vis learning venues of the workplace or in-firm instruction. On the other hand, the trade unions and representatives of vocational school teachers' associations demand that they should be integrated into (vocational) school centres. The Federal Association of Vocational School Teachers, in particular, fears that, as a result of the expansion of group training workshops, the dual system could change into a 'triple system'. Industry and the crafts do not consider this a

danger as long as group training remains, in law, a component part of on-the-job training and tasks connected with such training alone are carried out. The vocational school teachers also note, with suspicion, that group training workshops are given relatively generous financial promotion by the Federal Government and the Länder, whereas financial promotion of the vocational schools (by the Länder) can only be described as moderate. This could mean that one day young people from a very modern group training workshop could come into vocational schools with inadequate or outdated facilities.

Quite apart from this controversy, which, in the final analysis, is also an expression of differing basic trends with regard to vocational training policy, group training workshops are at present – and, indeed, will be in the future – of particular importance for training in the crafts. This can be seen from the fact that craft organizations (Chambers, guilds and so on) are the most frequent providers of these group workshops. At the end of 1980 the crafts had some 40 000 workshop and over 25 000 theoretical instruction places in such group establishments; these figures have meanwhile risen to over 50 000 and 30 000 respectively. The craft organizations stress that in addition to supplementing on-the-job training and adjusting to technical and economic developments, these training workshops will take on additional functions. Here they are referring particularly to the provision of vocational training for young people with learning difficulties and for the growing number of migrant workers' children.[30]

The numerical growth of training places in *all* group training workshops and centres may be seen from the following table.

Tab. 21 Training places in group work/centres[31] (Workshop and theoretical instruction places)

Year	1975	1979	1981
Total number	32 218	44 678	53 192
Crafts	25 832	34 764	41 493
Industry	4 561	7 193	8 509
Cooperation*)	1 825	2 721	3 190

*) e.g. between the crafts and industry

30 Cf. Paul Schnitker: Lernort Betrieb – Lernen am Arbeitsplatz, in Berufsbildung in Wissenschaft und Praxis, special issue December 1980.

31 Partly from: Federal Institute for Vocational Training: Überbetriebliche Ausbildungsstätten, Bestand und Strukturen 1981, Bonn 1983 (manuscript).

3.3.4 The learning venues of the Berufsschule

3.3.4.1 Berufsschule instruction as a learning venue

From the didactic aspect the Berufsschule is no more a uniform learning venue than is the firm. In addition to the kind of instruction that is typical of every kind of school, referred to here as the '*Berufsschule instruction*' venue, there is also the learning venue '*Berufsschule workshop*'. However, unless the Berufsschule is organized to provide the Basic Vocational Training Year (BVY) in the first year (full-time)[32], by far the greater part of its learning potential is realized in the form of (part-time) Berufsschule instruction, irrespective of the fact that compulsory attendance may be for one, one and a half or two days a week, or for eight, nine or ten hours, etc., depending upon the Land concerned, the school and the occupation for which training is being given. From the time aspect, at any rate, we see that – as with in-firm learning venues – there is considerable variation in Berufsschule instruction.

The functions of Berufsschule instruction derive from the tasks laid down for these schools as a whole in the Decision of the Standing Conference of the Ministers of Culture of the Länder dated 8 December 1975 (Designations of vocational schools). Pursuant to this, it is the task of the Berufsschule 'to impart to the pupils general and *specialized* learning contents, having particular regard to the requirements of vocational training'. In the foreground – also as regards the time devoted to them – are the *specialized* learning contents, or the theoretical foundations of science-technology, mathematics and technical drawing associated with the occupations concerned.[33] The *general* learning contents, as specified by the Standing Conference, are primarily of an economic-political nature, but also religious.[34]

3.3.4.2 The Berufsschule workshop as a learning venue

In many, if not most, Berufsschulen in the Federal Republic of Germany there is, in addition to the Berufsschule instruction, a second learning venue in the form of the *Berufsschule workshop*. It has already been indicated indirectly in the description of 'Berufsschule instruction' that, viewed from the aspect of the curricular time devoted to it, the workshop has a relatively subsidiary role. Yet this particular venue reflects differing concepts of the functions and position of the Berufsschule as a whole within the framework of the dual system. An analysis of the workshop's functions, the theoretically conceivable as well as those occurring in practice, leads to widely differing results.

---

32 Cf. p. 161 et seq.

33 For Berufsschule subjects and time devoted to them, see Documentation, No. 5.

34 It should be remembered that, under the Basic Law, religious instruction is compulsory in all schools in the Federal Republic.

From this we can isolate *four variants*:

Variant 1: The Berufsschule workshop *imparts occupational skills*, or practice, and to this extent is in competition with in-firm training. This very rarely occurs if one disregards the training kitchens found in all Berufsschulen with home economics classes. However, to the extent that a Basic Vocational Year (in the form of full-time schooling) has been established at these schools for certain occupational fields, skills are likewise taught as part of the basic training.

Variant 2: The Berufsschule workshop serves to *supplement on-the-job training*. Those skills are taught which, for various reasons, can no longer be imparted in the firms, or in many firms at any rate, but which form part of the skilled occupation description.

Variant 3: Instrumentally, the Berufsschule workshop is assigned to the specialized learning contents of the 'Berufsschule instruction' learning venue. It fulfils the function of a 'visual aid' to provide a basis for the theoretical instruction and is a *demonstration workshop*.

Variant 4: The Berufsschule workshop serves to convey scientific and technological knowledge through experiments. In this connection one hears of the *experimental study of the characteristics of working materials and tools* and, in learning venue terminology, *Berufsschule-typical laboratories*.

'Model offices' are not very often found in Berufsschulen. Variously called training bureaus or training firms in the literature and in practice, they are not primarily intended to contribute towards basic training, as is usually the case with workshops for industrial and technical occupations. Rather do they seek to simulate practical office work, the main aim being to provide facilities for the application and exercise of clerical-administrative knowledge and skills in conditions closely resembling those of a real office. Berufsschule workshops vary considerably as far as equipment is concerned, depending upon whether they are training workshops (e.g. for the basic vocational training), supplementary workshops, demonstration workshops or Berufsschule-typical laboratories. The same is true of the teaching staff. In the training and supplementary types we find occupational practicians and trainers, as we would in in-firm training, whereas the demonstration workshops and the laboratories are staffed by academically-trained vocational school teachers, some of them assisted by practicians.

Finally, it should be mentioned that of late the learning processes in the Berufsschule workshops have often been termed 'Practical occupational instruction' or 'Practical skill instruction', the primary aim being the acquisition of occupation-specific knowledge through experimentation or practical activity in the sense of Variant 4. In some Länder, such as Bavaria and Baden-Württemberg, '*Practical skill instruction*' (**Praktische Fachkunde**) is shown as a separate subject in the tables showing the weekly time devoted to subjects.

3.4 Prerequisites for the employment and in-firm training of apprentices

3.4.1 Technical prerequisites

3.4.1.1 Technical prerequisites for industrial and commercial undertakings

Since the objective of training is to qualify the trainee for employment in a skilled occupation (Art. 1, para. 2 of the Vocational Training Act), it should be ensured that the training establishment is equipped to conform with present-day standards of technology, organization and administration. Therefore trainees may be employed only if

- the training firm is suitable, with regard to both type and equipment, for imparting vocational training (Art. 22, para. 1, VTA),
- the number of trainees is commensurate with the number of training places or the number of skilled workers employed.

The training establishment is normally regarded as meeting the first criterion when the occupational knowledge and skills prescribed in the Training Ordinance for reaching the training objective can be imparted in full, in a form dictated by their purpose, chronologically and technically organized, within the specified training period.

The second criterion is intended to guard against 'conveyor belt apprentices' . But training places in the sense of this regulation does not only mean training workshops and training bays etc. devoted exclusively to vocational training but also workplaces which provide practice-related and effective vocational training.[35]

The 'commensurate number' of trainees vis-à-vis the number of training places or skilled employees is not regulated by the VTA. The ratio is determined by the appropriate Chamber as the competent body (Art. 44, VTA).

Training establishments which cannot impart the necessary knowledge and skills in full are also regarded as suitable if this deficiency is remedied through *training measures outside the training firm* – e.g. in training workshops or other group establishments (Art. 22, para. 2).

3.4.1.2 Technical prerequisites for craft establishments

For vocational training in the trades shown in Annex A of the Crafts Code[36] the 'right to employ and train' is regulated by the provisions of that law (cf. Arts. 21-24 and Art. 25, para. 1, Art. 27, para. 1 and Art. 46, para. 2).

---

35 Cf. written report of the Bundestag Committee for Labour. Bundestagsdrucksache V/4260.

36 Crafts Code in the version of 28 December 1965, Federal Gazette 1966 Part I, No. 1, p. 1, last amended by the Vocational Training Act of 14 August 1969, Federal Gazette I, p. 1112.

Analogous to Article 22 of the VTA, Article 23 of the Crafts Code lays down that apprentices may be employed only if

- the training firm is suitable, with regard to both type and equipment, for imparting vocational training,
- the number of trainees is commensurate with the number of training places or the number of skilled workers employed (Art. 23, para. 1 of the Crafts Code).

If the necessary knowledge and skills cannot be imparted in full, a training firm is still regarded as suitable if this deficiency is remedied through *training measures outside the training firm.*

The basis for properly regulated training and for decisions regarding suitability by the competent authority under Land law, after consultation with the Crafts Chamber (Art. 24, paras. 2 and 3, Crafts Code), are the Training Ordinances (Art. 25 and Art. 27, Para.1, Crafts Code).

3.4.2 Prerequisites regarding personnel for the employment and training of apprentices

3.4.2.1 Prerequisites in industrial and commercial undertakings

An individual has the right to employ and train (apprentices) if he is *personally*[37] and *technically* suited to the task (Art. 20, paras. 1–3). A person is technically suitable if he has the necessary occupational knowledge and skills, together with the required vocational teaching knowledge.

The legislature has apparently proceeded from the premise that possession of the necessary knowledge and skills, coupled with outstanding occupational ability, are necessary qualities but not in themselves adequate for ensuring good vocational training in the didactic-methodical sense.

However, the law does not require the *employer* (who is ultimately responsible for training) to carry out the training himself; he can entrust the task to a *trainer*[38], who must be suited to it, both personally and technically (Art. 6, para. 1, item 2). This right to delegate recognizes the realities of the shop floor, since vocational training today is increasingly carried out in large concerns, where the person ultimately responsible for training – if he is a physical person at all – cannot devote himself to training to the extent that is required or does not, himself, have the right to train.

Article 21 of the Vocational Training Act made possible the promulgation in 1972 of a statutory instrument governing the occupational and pedagogic qualifications required of a trainer in industry and commerce (abbreviated title: Trainers' 'Aptitude Ordinance' – **Ausbilder-Eignungsverordnung**). Pursuant to this, the employer, or the trainers appointed by him, must

37 Personally unsuitable means, in particular, someone who may not employ children and young persons (Cf. also Art. 39, Young Persons (Protection of Employment) Act).

38 The person employing a trainee, i.e. concluding a training contract with him,is the person ultimately responsible for training; if he also imparts training he is at the same time the trainer.

prove, in an examination, that they are technically suitable in that they have the necessary occupational and pedagogic knowledge. The following summary, based on the text of the 'Aptitude Ordinance', lists the most important subjects in which the trainers are required to satisfy the examining board:

a) Basic vocational training matters:

- The status and importance of vocational training in our educational, training and social system.
- Possibilities and limitations of the 'dual' system of vocational training.
- The role of the trainer in on-the-job vocational training.

b) Planning and implementation of training:

- Planning of individual phases of training in accordance with the Training Ordinance.
- Questions of content and methods for the implementation of training.
- Assessment of apprentices and their work.

c) The young person in training:

- Typical development features and behaviour patterns of young people (difficulties in training).
- The aptitude, ability and performance of young people.
- Prevention of accidents and industrial hygiene.

d) Legal bases of training

- The Basic Law and the Land Constitution,
- Labour and social law,
- The Vocational Training Act and youth protection regulations.

The trainer has to satisfy these requirements only (in the words of the Aptitude Ordinance) 'in industry and commerce'.[39]

This means that the crafts, in particular, but also agriculture and home economics, are not covered by this Ordinance (cf. also Art. 6), since the master's examination in these sectors also

39 Cf.: Haase, H., H. Richard & H. Wagner: Berufsbildungsgesetz mit Schriftlichem Bericht des Bundestagsausschusses für Arbeit und mit Erläuterungen, Cologne 1970, note on Art. 75, Vocational Training Act.

embraces 'vocational-pedagogic knowledge', therefore separate proof of capability is regarded as superfluous.[40]

The training of trainers is also delimited by transitional regulations published on 25 July 1974 and, more recently, on 30 June 1982. The latest amendment to the Trainers' Aptitude Ordinance for Industry and Commerce exempts from the trainer's examination, for an unlimited period, trainers who have been so employed for at least five years continuously prior to 31 December 1984 or for a total of six years since 1 September 1964, without giving cause for complaint.

3.4.2.2 Prerequisites for personnel in craft establishments

Basically, apprentices may be trained in the crafts only by persons over the age of twenty-four who have passed the master craftsman's examination in the trade for which training is to be given (Art. 21, para. 3, Crafts Code). The employer must conduct the apprentice's training himself or through a representative entitled to act as trainer (provision is made for delegation in Art. 21, para. 4 of the Crafts Code).

In the crafts the trainer is not specifically required to produce proof of pedagogic competence as well as technical skills and knowledge because it is assumed that in passing the master craftsman's examination – which calls for a certain degree of 'vocational-pedagogic knowledge' – the would-be trainer has already supplied proof of such capability.

'Through the master craftsman's examination it must be established whether the candidate is capable of running a craft establishment independently and training apprentices as required by law; in particular the candidate must demonstrate whether he can perform the work customary in his trade to the standard required of a master craftsman and possesses the necessary technical, managerial, clerical, legal and vocational-pedagogic knowledge' (Art. 46, para. 2, Crafts Code).

3.4.3 Special regulations

3.4.3.1 Special regulations in the liberal professions

The Vocational Training Act deals specifically with the following occupations, which are found in the liberal professions:

- assistants to lawyers and notaries,
- assistants in business and tax advisory occupations,
- doctors' and pharmacists' assistants.

---

40 Cf. section 3.4.2.2

For these 'liberal professions' it is laid down (departing from Art. 20, para. 3, item 1) that:

For each skilled occupation, the occupational knowledge and skills which constitute technical suitability are possessed by a person

- called to the bar or practising as a patent agent or notary public,
- recognized or appointed as a certified public accountant, chartered accountant, tax consultant or tax attorney,
- licensed or appointed to practise medicine or pharmacy (cf. Arts. 88, 90 and 92, VTA).

Thus knowledge of vocational and labour pedagogics is not mentioned here. Nevertheless, the Federal Minister for Education and Science, referring to Article 21 of the VTA, or the Minister otherwise responsible, could decide that, in addition to the prescribed technical suitability, evidence of pedagogic knowledge must also be provided.

3.4.3.2 Special regulations in the public service

Pursuant to Article 2, para. 2, item 1, the Vocational Training Act does not apply to vocational training in an employment relationship under public law. Manifestly the legislature assumes that the state, as the provider of training measures, will fulfil the conditions laid down in the VTA for employers and trainers.

So, in accordance with Article 84 of the VTA, it is not the Chamber but the supreme authority of the public service concerned that is the competent body for

- supervision of the personal and technical suitability,
- the suitability of the training establishment,
- cases where the competent authority under Land law must, before refusing permission to employ and train, consult the supreme authority.

But in those cases where, in the public service, training is given in skilled occupations in the so-called other areas – for the most part in industrial or craft occupations – the competent body for these occupations (usually the Chamber of Industry and Commerce or the Crafts Chamber) remains basically responsible even though training is being carried out within the public service.

Only in so far as it is a matter of supervising the suitability of the trainers and the training establishments and, where necessary, identifying and indicating deficiencies (Arts. 23 & 24, VTA) and generally supervising the implementation of vocational training (Art. 45, VTA) is the supreme public service authority, or a subordinate authority appointed by it, to be responsible (Art. 84, para. 1, item 1, VTA).

On the other hand, Art. 84, para. 1, item 2 of the VTA confirms the absolute responsibility of the supreme or subordinate authority for training in skilled occupations within the administration

(such as a skilled road maintenance worker, or a draughtsman/draughtswoman in the water supply and distribution administration).[41]

3.5 Objectives and contents of vocational training within the framework of the dual system

3.5.1 Objectives and contents of vocational training within the firm

3.5.1.1 The Training Ordinances as didactic outline regulations

3.5.1.1.1 Legal basis and competencies

Under the Vocational Training Act (Art. 28) young persons under the age of eighteen may be trained only in *recognized skilled occupations*. Likewise, under Art. 28, such training must be given on the basis of the relevant *Training Ordinance*. In the Training Ordinances, for the publication of which the Federal Government is responsible, the *objectives* and *contents* of apprenticeship training in firms are laid down. Pursuant to Art. 25 of the VTA the Minister responsible (e.g. the Minister for Economics) can, in agreement with the Federal Minister for Education and Science[42] 'give state recognition to skilled occupations, abrogate such recognition and publish Training Ordinances for the recognized skilled occupations' by *statutory instrument*. For craft occupations as shown in Annex A of the Crafts Code, Art. 25, para. 1 of that Code is the legal basis for the publication of Training Ordinances.

The Training Ordinances are made legally effective and thus generally binding for the training firms, the trainees and the competent bodies through statutory instruments published by the Minister responsible (e.g. the Federal Minister for Economics), in agreement with the Federal Minister for Education and Science. These instruments do not require the approval of the Bundesrat to become legally valid and are published in the Federal Gazette.

3.5.1.1.2 Structure and content of the Training Ordinances

The Training Ordinance must lay down at least the following (Art. 25, para. 2, VTA):

- the designation of the skilled occupation,
- the duration of training,
- the knowledge and skills which are the subject of vocational training (*skilled occupation description*),

41 Cf.: Schriftlicher Bericht des Bundestagsausschusses für Arbeit, Bundestagsdrucksache V/4260 (Written report of the Bundestag Committee For Labour concerning Art. 84 [competent body] of the Vocational Training Act).

42 In the Vocational Training Act the Federal Minister for Labour and Social Affairs is given here, but since the Federal Chancellor's Organizational Decree of 15.12.1973 this responsibility has been transferred to the Federal Minister for Education and Science.

91

- directions for the technical and chronological organization of instruction in the knowledge and skills (*outline training plan*),

- the *examination requirements* for the final (qualifying) examination.

The most important features of every Training Ordinance are:

- the skilled occupation description,

- the outline training plan,

- the examination requirements.

The skilled occupation description sets out (usually briefly) the *knowledge and skills* demanded in the particular state-recognized occupation (e.g. motor-vehicle electrician).

The outline training plan forms the biggest section of a Training Ordinance. It gives directions as to which parts of the skilled occupation description are to be dealt with in a particular period and the chronological sequence of these phases. So the outline training plan sets out the structure of both the training *matter* and the *timetable*, thus providing a basis for drawing up training plans for the *firm* and the *individual*. On 28/29 March 1972 the Federal Committee for Vocational Training[43] passed a recommendation for the technical and chronological organization of vocational training which can serve as a guide for firms in drawing up training plans.[44]

The examination requirements contain concrete information about the subject or areas covered by the examination; also skill-specific assessment criteria, such as the weighting of performance in individual parts of the examination.

All Training Ordinances published after the passing of the Vocational Training Act (14 August 1969) also contain, in accordance with Art. 42 of the Act, more or less detailed information concerning the *intermediate examination*. Pursuant to the VTA (Art. 6, para. 1, No. 4, Art. 39, para. 1, No. 2) the trainee is required to maintain a *report book*, if this is laid down in the Training Ordinance. Most of the newer Training Ordinances contain such a regulation, which derives from a recommendation made by the Federal Committee for Vocational Training on 24 August 1971 that such a book be kept in the form of a record (proof) of training, the recommendation being accompanied by a prototype for the book.[45]

Art. 25, para. 2 of the VTA lays down the *duration of training*, which is to be not more than three years and not less than two. In most of the skilled occupations it lasts three years, but there are some in which it lasts three and a half. In the older Training Ordinances, at any rate, duration of training is not always an indication of higher or lower qualification, or of larger or smaller training

43 No longer exists! Its tasks have been taken over by the Central Committee of the Federal Institute for Vocational Training (BIBB).

44 Cf. Documentation, No. 6.

45 Cf. Documentation, No. 7.

content. We find that training for a dentist's assistant lasts three years, but only two for a doctor's assistant.

In various Training Ordinances it is laid down that the period of training is to be reduced (usually by one year) if the trainee has already passed the final examination in another skilled occupation or holds a leaving certificate from the tenth class of a secondary school, or the equivalent. In these instances, the reduction in the period of training has to be an *integral part of the vocational training contract.* In addition, the training period can be shortened under Art. 29, para. 2 of the VTA, according to which the competent body must, if the trainee so *requests*, reduce the training period if it is expected that he will reach his training objective within the reduced period. The structure and finer details of the Training Ordinances are not laid down in the Vocational Training Act. The 'Recommendation of a scheme for Training Ordinances for mono-occupations' (i.e. individual occupations without graduated training) passed by the Federal Committee for Vocational Training[46] at its meeting on 28/29 March 1972 has helped to make the newer Training Ordinances relatively uniform in structure.

3.5.1.1.3 Numerical development of Training Ordinances

Every year the Federal Minister for Education and Science publishes an *Index of recognized skilled occupations*, together with the relevant Training Ordinances.

Table 22 gives an overview of the quantitative development of the skilled occupations between 1977 and 1986 and to make this more understandable two points need to be elucidated:

1. What are recognized skilled occupations pursuant to Art. 25 of the VTA and Training Ordinances published under Art. 25 of the Crafts Code?

2. What are comparably regulated recognized skilled occupations?

Re 1.) Recognized *skilled occupations in the crafts* are, in law, all the trades shown in Annex A of the Crafts Code (Art. 25, Crafts Code) in the version of 28 December 1965, last amended by the Law to Introduce the Penal Code of 2 March 1974. For these skilled occupations, therefore, Training Ordinances only are published. The *non-craft skilled occupations* (Art. 25, para. 1, VTA) are recognized through statutory instruments.

Re 2.) According to Art. 108, para. 1 of the VTA, comparably regulated skilled occupations are regarded as skilled occupations in the sense of Art. 25, para. 1. In most instances these are internal regulations of the competent bodies.

Over the past decade the number of skilled occupations has decreased steadily. This process of concentration is the *deliberate aim* of vocational training and vocational pedagogic policy. Rapid technological and economic change in the modern world of work demand a high degree of mobility in the interests both of the worker and the national economy and an essential prerequisite

46 No longer exists. Its tasks are now carried out by the Central Committee of the Federal Institute for Vocational Training.

for this is the widest possible qualification profile. So, for example, we find that out of the carpenter and joiner, the moulding gilder, the wood machinist, the cabinet maker and the chairmaker has emerged the one skilled occupation of wood mechanic. The new skilled occupation of 'printer' replaces four former skilled occupations, that of 'copymaker' six, and a 'printing form maker' five. With the Regulation on vocational training in the industrial metal-working occupations of 15.1.1987[47], there are now 17 recognized training occupations replacing the former 38. Skilled occupations which are narrow in content restrict both mobility and adaptability and reduce a person's chances on the labour market. This was another reason why ninety-eight skilled occupations in industry, commerce and the crafts were abolished without replacement through an ordinance on the abrogation of recognition of skilled occupations published by the Minister for Economics on 10 August 1972.

Since the coming into force of the Vocational Training Act (1969) much progress has been made in

- the abolition of outdated Training Ordinances and skilled occupations,
- the modernization of existing Training Ordinances and
- the development of new Training Ordinances.

The new and more modern Training Ordinances issued since then regulate vocational training for about 1.4 million young people, that is to say by far the largest proportion (i.e. approx one-third) of all trainees (1985: 1.83 million).

For most of the remaining trainees, new training ordinances are currently being drafted.

47 Federal Law Gazette, Section I, 24 January 1987, No. 6, p. 274 ff.

Tab. 22 Quantitative development of recognized skilled occupations 1977–1983[48]

Form of recognition/ Training sectors	Number of skilled occupations									
	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
I	2	3	4	5	6	7	8	9	10	11
Skilled occupations recognized under Art. 25, Vocational Training Act Training Ordinances issued under Art. 25, Crafts Code										
Industry, commerce, service industries	56	59	63	71	81	82	84	92	91	98
Crafts	8	10	12	12	18	20	24	29	31	33
Industry and crafts	17	18	18	18	18	21	25	27	30	32
Agriculture	8	8	8	8	8	9	9	9	9	9
Public service	5	5	6	8	8	8	9	9	9	9
Industry and public service	1	1	1	1	1	1	1	2	2	2
Industry and agriculture	–	–	–	–	1	1	1	1	1	1
Home economics and agriculture	2	2	2	1	1	1	1	1	1	1
Liberal occupations	4	5	5	6	6	6	6	6	6	8
Total	101	108	115	125	142	149	160	176	180	193
Skilled occupations recognized prior to the coming into force of the Vocational Training Act (Art. 108, para. 1, VTA, Art. 122, para. 5, Crafts Code)										
Industry, commerce, service industries	207	203	197	193	180	175	168	157	155	142
Crafts	116	113	112	110	103	95	87	80	75	69
Agriculture	2	2	2	2	1	1	1	1	1	1
Public service	1	1	1	1	1	1	–	–	–	–
Home economics	–	–	–	–	–	–	–	–	–	–
Liberal occupations	4	2	2	2	2	2	2	2	2	1
Total	330	321	314	308	287	274	258	240	233	213
Comparably regulated skilled occupations (Art. 108, para. 1)										
Industry, commerce, service industries	1	1	1	1	1	1	1	1	1	1
Agriculture	6	5	4	4	4	3	3	3	3	3
Public service	15	15	15	12	11	11	11	11	11	10
Others	2	2	2	1	1	1	1	1	1	–
Total	24	23	22	18	17	16	16	16	16	14
Total number of recognized, or regarded as recognized, skilled occupations	455	452	451	451	446	439	434	432	429	420

48 Index of recognized skilled occupations. Pub: Federal Institute for Vocational Training. 1986 edition, p. 243.

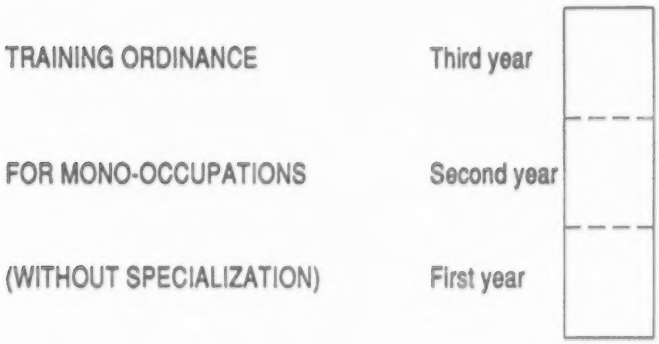
3.5.1.1.4 Types of Training Ordinances[49]

Training for the new skilled occupations takes three forms:

- mono-training,
- mono-training with specialization (**'Schwerpunkte'** or **'Fachrichtungen'**),
- polyvalent (graduated) training.

The Training Ordinances for mono-occupations (without specialization) provide for a uniform skilled occupation description and a uniform outline training plan for all trainees, with no differentiation. An example of a Training Ordinance for a mono-occupation without specialization is that for screen printers, dated 1 August 1974.

Fig. 16



In the case of mono-training with specialization, we find differentiation in the training contents in the second or third year of training. Mono-training with specialization is appropriate where the necessary or – from the trainee's point of view – desired differentiation does not justify division into several skilled occupations. This specialization takes two forms:

(a) 'internal' specialization (**'Schwerpunkte'**)

(b) 'external' specialization (**'Fachrichtungen'**)

Mono-training with **Schwerpunkte** represents the weakest form of specialization; it is not apparent in the skilled occupation description but *emerges in the outline training plan.*

49 Cf. Maslankowski, W.: Ausbildungsordnungen. Eine erste Zwischenbilanz, in Zeitschrift für Berufsbildungsforschung (1974) 2.

Mono-training with **Schwerpunkte** exploits the special training possibilities and conditions of the firm without excessive restriction or neglect of the field of activity specified in the skilled occupation description.

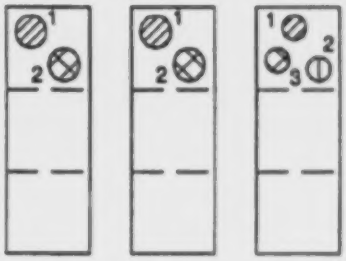
An example of a Training Ordinance for mono-training with **Schwerpunkte** is that for printers dated 1 August 1974. The outline training plan lays down that 'the knowledge and skills listed in Part IV of the Annex should, according to choice and having regard to the nature of the training establishment, be imparted in one of the three **Schwerpunkte**, surface printing, flat-bed printing and rotogravure'.

Fig. 17

TRAINING ORDINANCES

FOR MONO-TRAINING

WITH **SCHWERPUNKTE**

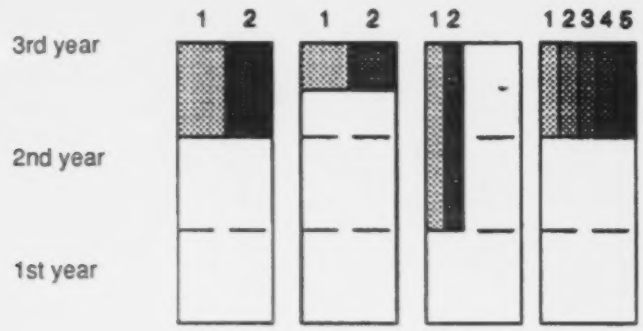


In mono-training with **Fachrichtungen** the forms of specialization are already apparent in the *skilled occupation description.* An example of a Training Ordinance for this kind of training is that for butchers, dated 15 August 1972. Pursuant to this, the vocational training can be directed towards production or selling. Common training, lasting thirty months, is given for both **Fachrichtungen**, and subsequent training in the selected speciality lasts six months.

Depending upon the skilled occupation, training in the **Fachrichtung** can cover a wider or narrower field and commence earlier or later, also the number of **Fachrichtungen** varies from one skilled occupation to another.

Fig. 18

Training Ordinances for mono-training with **Fachrichtungen**



In the case of *polyvalent (graduated) training*, vocational training is normally given in two stages. In the first year of the first stage those skills and knowledge are imparted which form the basis of training in all the skilled occupations covered by the Training Ordinance. Proceeding from this, the second year of the first stage is devoted to specialized training which

- leads to a qualification in a recognized skilled occupation and, at the same time,
- contains, alongside specialized contents, common training contents for the second stage to which it leads.

At the end of this (in this instance two-year) stage a first qualifying examination is taken. A successful candidate then has a full vocational qualification and can take up skilled employment. But he can also continue his training forthwith, or at a later date. The second stage, which is naturally more demanding, leads to a further, more highly specialized, vocational qualification.

This form of graduated training is intended to provide the broadest possible basic training, further deferring specialization aimed at a particular skilled occupation. This enables the young person to choose, from several skilled occupations open to him, the one best suited to his capabilities and inclinations, and thereby make a more soundly-based decision than hitherto. Lastly, graduated training gives the trainee the opportunity to learn several individual occupations within a relatively short training period, which fits him for any adaptation processes or retraining measures that may become necessary.[50]

The legal basis for Training Ordinances drawn up in accordance with the principle of graduated training is Art. 26 of the Vocational Training Act, according to which the Training Ordinance can lay down successive stages of vocational training, specially regulated both technically and

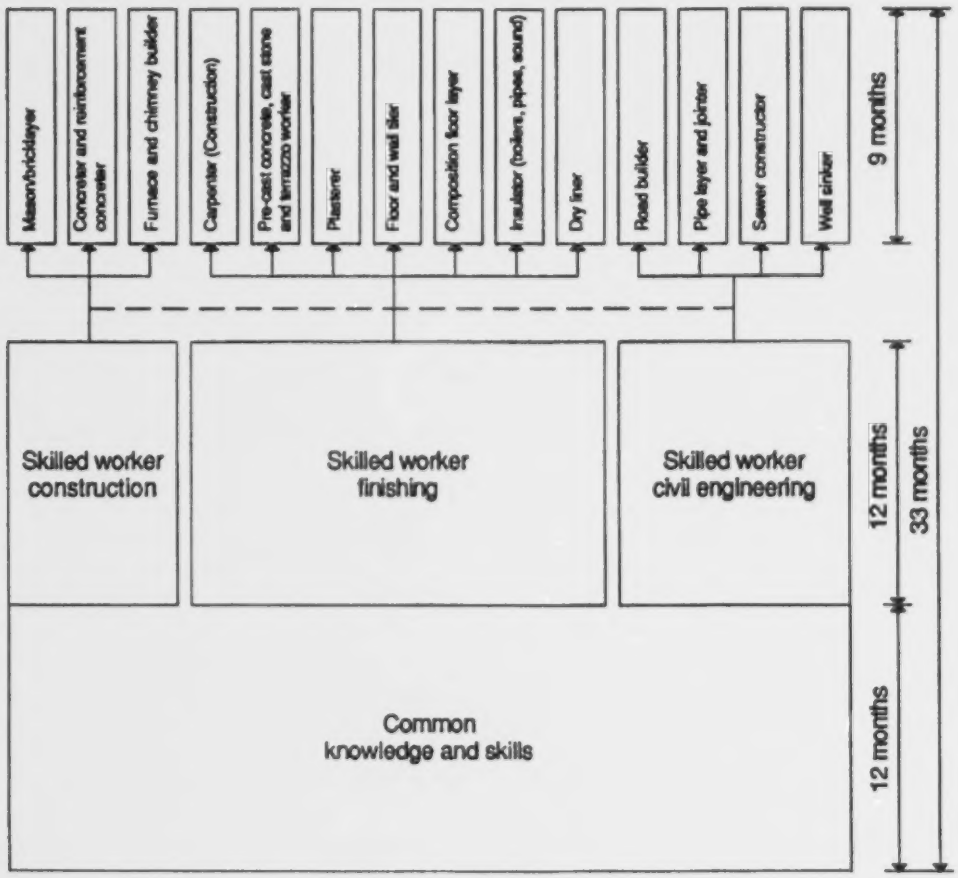
50 See, however, p. 120.

chronologically. Furthermore, the Training Ordinance can rule that, for an examination taken before the end of a particular stage, regulations governing the final examination shall apply.

Fig. 19 and the example of the 'Ordinance on vocational training in the construction industry' of 8 May 1974 will illustrate the principle of graduated training and its realization within the framework of the Training Ordinances.

The ordinance on vocational training in the construction industry also regulates training in the corresponding craft occupations.

Fig. 19 Training ordinance for polyvalent (graduated) training



During recent years new Training Ordinances were introduced mainly in order to

- create or regulate new skilled occupations,
- modernize training contents and adapt them to technological developments,
- give the vocational training content a broader base.

3.5.1.1.5 Initiatives and criteria for the development of Training Ordinances

In its comments on the preparation and harmonization of Training Ordinances and outline curricula, dated 18 February 1974, the Federal Committee for Vocational Training[51] names the following as institutions which can take the *initiative* for the development and publication of Training Ordinances:

- employers' associations and central organizations,
- trade unions,
- competent bodies,
- central organizations of the Chambers,
- the Federal Committee for Vocational Training[52],
- the Land Committees for Vocational Training,
- the Federal Institute for Vocational Training,
- the Federal Ministries.

The initiative is most frequently taken by the employers' associations and central organizations and the trade unions, but if it does come from elsewhere then, in accordance with generally recognized practice, proposals for a Training Ordinance are not submitted to the competent Minister without consulting the appropriate employers' associations and central organizations and those of the trade unions. This also means that, as a rule, Training Ordinances are not published against the wishes of these central representative bodies of employers and workers.

With the aim of steering initiatives for new Training Ordinances along lines which are desirable from both vocational training policy and vocational pedagogic aspects, the Federal Committee

51 No longer exists. Its tasks have been taken over by the Central Committee of the Federal Institute for Vocational Training.

52 No longer exists. Its tasks have been taken over by the Central Committee of the Federal Institute for Vocational Training.

for Vocational Training[53] decided on 25 October 1974 upon a recommendation concerning criteria for the recognition and abolition of skilled occupations. It contains important directions, particularly for the creation of skilled occupations having new contents, and lists the following criteria for recognition:

- adequate requirement for the qualifications concerned, which is not limited in time or confined to a particular firm,
- training for qualified activities, for which the worker has sole responsibility, over the widest possible area,
- potential for permanent occupational activity which is not dependent upon age,
- broadly-based basic vocational training,
- availability of a regulated course of training,
- adequate demarcation from other skilled occupations,
- possibility of making the training objectives operational,
- training lasting between two and three years,
- basis for further training and promotion,
- acquisition of the ability to think and act independently in the application of knowledge and skills.

3.5.2 Objectives and contents of vocational training in the Berufsschule

*3.5.2.1 The tasks of the **Berufsschule***

The Berufsschule differs substantially from all other vocational schools in two respects:

- It is predominantly a part-time school.
- As a publicly-run (state) school it has a task which it carries out jointly with another field of training, namely in-firm apprenticeship training. The latter is not part of public education but a sub-system of the economy.

In the Decision of the Standing Conference of the Ministers of Culture dated 8 December 1975 ('Designations of vocational schools') the second feature is emphasized in that the Berufsschulen are set the task of 'imparting to the pupil general and technical learning contents, having special regard to the requirements of vocational training'. Furthermore: 'Instruction is to

53 No longer exists. Its tasks have been taken over by the Central Committee of the Federal Institute for Vocational Training.

be (...) closely related to training in firms, including group training workshops'. The latter statement has both a *methodical aspect*: instruction in the Berufsschule shall, as far as possible, be linked to the vocational experience of the pupil as a trainee, and an *objective aspect*: the Berufsschule shall, in cooperation with the training firms, contribute to *vocational qualification*, in particular to the trainee's success in the final examination (to qualify as a skilled worker). In the Land law on schools in the Rhineland Palatinate dated 6 November 1974 this is formulated thus: 'As the partner of in-firm training, having equal rights, the Berufsschule leads, through phased basic and skill training, to the acquisition of vocational qualifications' (Art. 8, para. 1).

Even though representatives of the Berufsschulen may question the 'partner with equal rights' status of the school (in particular because it does not have the right to conduct its own examinations) there is no disputing the fact that, in practice, the Berufsschule and its teachers regard as their *main task* the imparting of the theoretical-technical foundations for the pupil's chosen occupation. The Berufsschule's conception of itself and the public recognition accorded it, especially by the economy, are the result, first and foremost, of these tasks which the school sets itself; the time-table[54] shows that the major part of the instruction time available is devoted to them. When, in connection with the tasks of the Berufsschulen, mention is also made of the 'general' learning contents, this refers primarily to the tasks of political, civic and religious education. Here it must be remembered that, pursuant to the Basic Law, religious instruction is compulsory at all publicly-run schools and therefore at the Berufsschule also; political education is likewise a separate subject. Seen as a whole, however, learning contents which are not directly related to a vocation or vocational qualification are given distinctly less importance. Nevertheless, the aims deriving from the socio-political concepts of a western industrial democracy are valid for the Berufsschule as they are for other schools; they include maturity and emancipation, critical ability and mobility.

3.5.2.2 The curricula of the Berufsschule

In accordance with the cultural autonomy of the Länder, the preparation and implementation of curricula for the Berufsschulen is a matter for the Länder and this results in differences, sometimes considerable, which affect both the procedure for drawing up curricula and their contents.

But the procedures for drawing up these curricula do not differ from those followed in preparing curricula for other types of schools. In some instances curricula commissions or didactic commissions are established which consist mainly or exclusively of Berufsschule teachers responsible for specific disciplines, while in others the task is allocated to special institutions. The Rhineland Palatinate, for example, has an 'Office for curriculum development and coordination' in Bad Kreuznach, Bavaria a 'State institute for schoolpedagogics' in Munich, and North Rhine-Westphalia a 'Land institute for curriculum development and further training of teachers' in Neuss. And lastly we find the two forms (curriculum commissions and special institutes) side by side; in these cases commissions are often given organizational support by the special institutes, and the benefit of their expertise.

54 Cf. Documentation, No. 5.

The *structure* of the curricula and the *degree of particularization* likewise vary considerably not only from Land to Land but also within a Land. They range from mere collections of material to outline curricula, learning-objective-oriented curricula and those which are fully elaborated, giving guidance on methods, use of the media and checking on the results of tuition.

A most important question arises in connection with the function of the Berufsschule within the dual system and that is whether the curricula also vary in content from Land to Land, whereas it will be remembered that the didactic foundations for in-firm vocational training are uniform throughout the Federal Republic. Basically, the Länder have had, and retain, freedom of action with regard to the contents of the curricula and this also applies, therefore, to those Berufsschule subjects which directly contribute to *vocational qualification*. As a rule, the Länder have made use of this freedom, but as they have always had the good sense to orientate the contents of their Berufsschule curricula more or less to the relevant Training Ordinances of the Federal Government, too great a divergence has been avoided. Even so, differences in content between the curricula of the Länder among themselves on the one hand, and between their curricula and the Federal Government's Training Ordinances on the other, do present a problem which has been dealt with for some years with the aid of a special *harmonization procedure*.[55]

3.5.3 Harmonization of Berufsschule curricula and Training Ordinances

The need for better harmonization and thereby the development of a special procedure arose primarily for the following reasons:

- Since the passing of the Vocational Training Act in 1969 the Training Ordinances have become increasingly detailed in content.

- The 4 July 1972 brought the statutory instrument concerning countability of the Basic Vocational Year (**Berufsgrundbildungsjahr-Anrechnungs-Verordnung**, since replaced by the **Berufsgrundbildungsjahr-Anrechnungs-Verordnung** of 17 July 1978); pursuant to this, successful completion of a school-based BVY (that is, within the competence of the Länder) counts as the first year of vocational training in a recognized skilled occupation assigned to the occupational field covered by the BVY. As a rule, however, the contents of the Training Ordinance for the first year of training did not coincide with the contents of the school-based BVY. When organizing their BVYs the Länder had not taken into account the relevant Training Ordinances of the Federal Government and the latter could not, or would not, adjust its Training Ordinances to the new situation brought about by the Basic Vocational Training Year, mainly because the vast majority of trainees still have no opportunity to complete a BVY.

- In their didactic conception the new Training Ordinances with graduated training diverge substantially from both the school-based BVY and the Training Ordinances for mono-occupations.

55 Cf. p. 143.

Finally it was generally recognized that the hoped-for improvements in vocational training through new Training Ordinances on the one hand and new concepts for the Berufsschule on the other could be achieved only if the contents of the Training Ordinances and the outline curricula for both the Berufsschule and the BVY were better dovetailed and harmonized.

This was the situation that resulted in representatives of the Standing Conference of the Ministers of Culture and the Federal Government, on 30 May 1972, deciding upon a 'Joint protocol of results concerning the procedure for harmonization of Training Ordinances and outline curricula in the field of vocational training by the Federal Government and the Ministers (Senators) of Culture of the Länder'.[56]

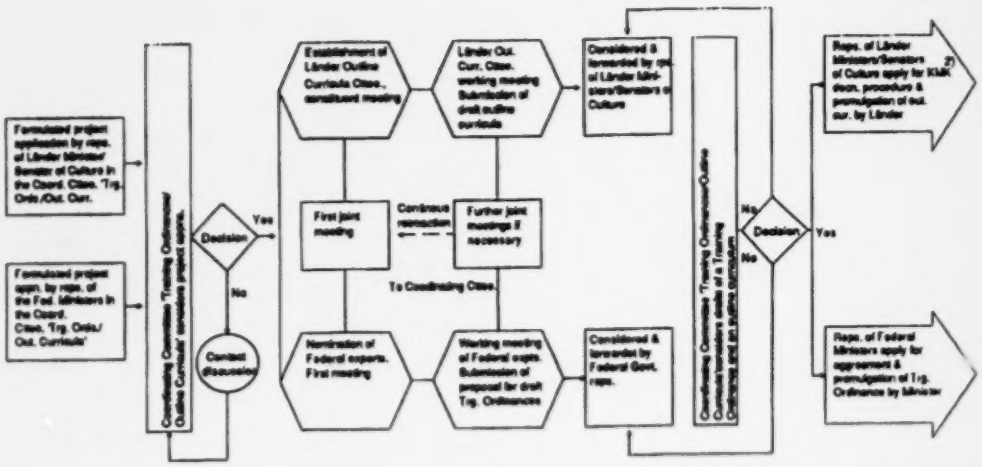
The most important result is that the protocol provides for the establishment of a *Coordinating Committee*, which has the following tasks:

'To agree on basic principles for the harmonization of Training Ordinances and outline curricula, also to arrange which Training Ordinances and outline curricula should be prepared for a process of reorganization and what committees (of experts) are required for this; to ensure, in the course of the harmonization procedure, the necessary retroaction to the responsible bodies and to undertake a final harmonization of the Training Ordinances and outline curricula before they are submitted to the responsible bodies with a recommendation for promulgation'.

On 8 August 1974, after protracted deliberation, the Coordinating Committee 'Training Ordinances/Outline Curricula' decided upon a 'Procedure for the harmonization of Training Ordinances and outline curricula in accordance with the joint protocol of results of 30 May 1972', which neither can nor should be described in detail here. The diagram on p.129a, however, gives an overview and shows this to be a relatively complicated procedure.

56 Cf. Documentation, 8. For constitutional reasons it was not possible to establish *one office* competent for the harmonization of Training Ordinances and outline curricula.

Fig. 20 Procedure for the harmonization of Training Ordinances and outline curricula as laid down in the joint protocol of results of 30 May 1972 (1.).



(1) Supplement to Annex II of the protocol of results of the sixth meeting of the Coordinating Committee 'Training Ordinances/Outline Curricula' on 8.8.1974

3.6 The examination system in the dual system

The examination system, which is directly related to apprenticeship training and based upon the Vocational Training Act, comprises the following examinations:

- the intermediate examination,
- the final (qualifying) examination,
- the master craftsman's examination,
- the further training examination.

They are described in this order, more space being devoted to the final examination as it is also numerically the most important.

3.6.1 The intermediate examination

Article 42 of the Vocational Training Act and Article 39 of the Crafts Code lay down that in the course of training a trainee must take 'at least one intermediate examination in accordance with the Training Ordinance' in order that his progress may be assessed. As with the final examination, the competent bodies are responsible for conducting the intermediate examination.

As a rule, both knowledge and skills are tested at this stage.

In skilled occupations with a three or three and a half year training period, these examinations are generally held before the end of the second year, and in occupations where training lasts two or two and a half years after completion of the first year.

A certificate is awarded, giving an assessment of the standard of training reached.

Evidence of having taken the examination is a prerequisite for admission to the final examination, as far as intermediate examinations are prescribed and conducted.

3.6.2 The final examination

3.6.2.1 Legal bases and competencies

Articles 34 to 41 of the Vocational Training Act provide the legal bases for conducting, setting and implementing the final examinations.

Final examinations have to be conducted in all recognized skilled occupations (Art. 34). Trainees are not obliged to take this examination but the vast majority do so; no fee is payable. In

1984 about 677 500 trainees took the final examination and the success rate was 89.3%.[57] The following have now also become accepted terms for the apprentice's final examination:

'Clerk's examination' in administrative and commercial occupations (**Kaufmannsgehilfenprüfung**),

'Skilled worker's examination' in industrial/technical occupations in industry (**Facharbeiterprüfung**),

'Journeyman's examination' in the crafts (**Gesellenprüfung**),

'Skilled agricultural worker's examination' in agriculture (**Landwirtschaftsgehilfenprüfung**).

The 'competent bodies' are responsible for setting and implementing the final examinations. Pursuant to Article 34 of the VTA they (Chambers of Industry and Commerce, Crafts Chambers, Agricultural Chambers, etc.) have not only the right but also the obligation to conduct final examinations in recognized skilled occupations. 'Implementing' the examination includes

- preparing the examination both formally and materially (announcement, fixing the date, arranging premises, setting the examination papers),
- the examination itself (establishing and assessing the performance of each candidate),
- post-examination procedure (notifying the results, preparing and awarding certificates).

3.6.2.2 Examination regulations

The competent body has to publish regulations for the final examination, having regard to the guidelines issued by the Federal Committee for Vocational Training.[58] These have to be approved by the supreme Land authority responsible (usually the Ministry of Labour or Economics). They cover admission to the examination, its structure, assessment standards, the awarding of certificates, consequences of contravention of the regulations, and re-sitting the examination (Art. 41, Vocational Training Act).

3.6.2.3 Examining boards

These are set up by the competent bodies (Art. 36, VTA) and consist of at least three members; they must be composed of representatives of employers and workers in equal numbers, together with at least one vocational school teacher (Art. 37, para. 2, VTA).

The members are appointed by the competent body for a period of three years, workers' representatives being nominated by the local trade unions and independent associations of workers

57 Federal Minister for Education and Science (Pub.): Vocational Training Report 1986, p. 46.

58 No longer exists. Its tasks have been taken over by the Central Committee of the Federal Institute for Vocational Training.

having social or vocational objectives, and the vocational school teachers in agreement with the schools supervisory authority or an office specified by it (Art. 37, para. 3, VTA).

For examining boards set up by the Crafts Chamber, the employees are appointed following a majority proposal by the journeymen's representatives at the plenary meeting of the Chamber (Art. 34, para. 4, Crafts Code).

The examining board elects from among its members a chairman and a deputy chairman, thus the former can be an employers' representative, a workers' representative or a representative of the Berufsschule. All members of the board serve in an honorary capacity.

3.6.2.4 Admission to the final examination

As a rule, when the trainee meets the requirements set out in Article 39 of the Vocational Training Act he has a *legal right* to be admitted to the final examination; however, he is not compelled to take it. The prerequisites for admission do not include (successful) attendance at a Berufsschule. If the competent body considers that the prerequisites are not met, then the examining board must make the decision regarding admission, and in such a case the Berufsschule can influence the decision through its representative on the board.

In the crafts, the chairman of the examining board decides upon admission to the journeyman's examination and in doubtful cases the board decides by a majority vote.

Under Article 39 of the VTA a candidate is to be admitted to the final examination if

1. he has completed the period of training or will do so not later than two months after the date of the examination,

2. he has taken the prescribed intermediate examination and maintained the prescribed report book and

3. his vocational training relationship has been entered in the register of training contracts, or has not been entered for reasons for which neither the trainee nor his legal representative can be held responsible.

In special cases the trainee, after his employer and the Berufsschule have been consulted, can be admitted to the final examination before the end of the training period if his achievements warrant this. Details are regulated in Article 40 of the VTA.

3.6.2.5 Examination requirements

These form part of the Training Ordinance published for every skilled occupation (Art. 25, VTA) and lay down the special requirements for every such occupation.

On the basis of these requirements it has to be established in the final examination 'whether the candidate possesses the necessary skills, has the necessary practical and theoretical knowledge and is conversant with the subject matter taught him in the Berufsschule which is essential for vocational training' (Art. 35, VTA). From this comes the division of the examination into two parts, a skills examination and an examination of knowledge. The skills section can take the form of work tests and (or) a so-called examination set piece.

The knowledge section is both oral and written, in certain cases (e.g. programmed examinations) exclusively written.

The 'Guidelines for examination requirements in accordance with Art. 41, VTA/Art. 38, Crafts Code' (**Bundesarbeitsblatt 10/71**) issued by the Federal Committee for Vocational Training[59] are merely recommendations for the competent bodies and therefore leave room for differences arising from the special circumstances of the skilled occupation or the branch of the economy concerned.

3.6.2.6 Involvement of the Berufsschule

Under the Vocational Training Act, involvement of the Berufsschule in the legal-institutional sense is restricted to the membership of Berufsschule teachers in the examining boards. In practice, however, participation by the Berufsschule in the conducting of final examination varies widely in degree and form according to the competent body, Land, etc. Nevertheless, the Berufsschule teachers have not, as yet, found acceptance for their demand that the Berufsschule leaving certificate be recognized as proof of knowledge in the sense of the final examination, which would do away with a separate test of knowledge.

3.6.3 The master craftsman's examination

Master craftsman's examinations are conducted in the *crafts* (Arts. 45-51, Crafts Code), agriculture (Art. 81, VTA), home economics (Art. 95, VTA) and industry (Art. 46, VTA).

Master craftsman's examinations in the crafts, in agriculture and in home economics are conducted by *state* examining boards set up by the authorities responsible under Land law, and whose administrative work is carried out by the appropriate competent body.

The examinations for qualifying as a foreman (**Industriemeister**) in various fields such as metal, communication technology or energy technology are not specifically regulated in the Vocational Training Act.

The legal basis upon which the competent body conducts foreman's examinations is Article 46 of the Vocational Training Act (further vocational training). Pursuant to this the competent body can, by examination, establish the extent of knowledge, skills and experience gained through

59 No longer exists. Its tasks have been taken over by the Central Committee of the Federal Institute for Vocational Training.

further training. The examination requirements are determined by the Vocational Training Committee of the Chamber of Industry and Commerce and approved by the supreme Land authority responsible. Nearly all Chambers of Industry and Commerce run courses for training aspiring foremen and conduct the examinations.

Unlike the examining boards for the crafts, agriculture and home economics, those for the foreman's examination are not state bodies but *boards of the competent bodies*, which conduct these examinations (as they do the intermediate and final examinations) themselves, and do not merely act in an administrative capacity.

In so far as there are no uniform statutory instruments[60] governing the foreman's examination for the whole of the Federal Republic (as there are for the other master's examinations), the Chambers of Industry and Commerce follow the 'Guidelines for further training examination requirements' (Arts. 46 and 41, VTA/Arts. 42 and 38, Crafts Code), which the Federal Committee for Vocational Training[61] adopted on 18 April 1973.

Prerequisites for admission to the master's examination are success in the final examination in a pertinent skilled occupation and at least three years' (in agriculture and home economics) or five years' (in industry and the crafts) practical vocational experience. There are no other formal conditions (such as education and courses of training) for admission to the master's examination.

Thus autodidactic preparation for the master's examination is not legally excluded, but as a rule candidates attend special courses or masters' schools for varying periods.

The courses, or attendance at training schools for master craftsmen, can take the form of full-time instruction for six to twelve months, or part-time study over two to two and a half years.

The *master's examination in the crafts*, in agriculture and in home economics normally consists of four parts:

- practical,
- specialized theoretical,
- economic and legal,
- vocational and labour pedagogic.

The *foreman's examination* is entirely theoretical (oral and written), with no practical element.

---

60 These have meanwhile been published for the following fields: Metal, Chemistry, Printing and Glass. Others, e.g. for Electrotechnology and Textiles, are in course of preparation.

61 No longer exists. Its tasks have been taken over by the Central Committee of the Federal Institute for Vocational Training.

For the *graphics trade* Article 77 of the VTA provides a special regulation, pursuant to which persons in certain trades are technically suitable to give vocational training if they have passed the master trainer's examination or the master craftsman's examination in the trade concerned.

To conduct the master trainer's examination, the body responsible under Land law sets up an examining board (para. 2). A candidate is admitted to the examination if 'he has passed the final examination in one of the graphics trades and can produce evidence of at least three years' experience thereafter in the trade in which he wishes to take the examination. Attendance at a **Fachschule** can count wholly or in part towards practical experience in the occupation' (Art. 77, para. 4, VTA).

In the crafts, agriculture and home economics, success in the master craftsman's examination and being awarded the title of 'master' bestows the right to train apprentices. Passing the foreman's examination (**Industriemeister**), however, gives no such right. In the graphics/printing industry the master's examination (master trainer's examination) is taken expressly to acquire the right to train apprentices.

3.6.4 The further training examination

As already mentioned in connection with the foreman's examination, the competent body can, under Article 46 of the Vocational Training Act, conduct examinations to establish the extent of knowledge, skills and experience gained in further vocational training. Statutory instruments decided by the Vocational Training Committee and published by the competent body regulate these examinations in detail.

In all there are (1986) 1 003 regulations covering 194 different occupations.[62] The following occupations are governed by the number of regulations indicated.

- **Bankfachwirt** (banking) 50
- Accountant 64
- **Handelsfachwirt** (commerce) 60
- **Industriefachwirt** (industrial office) 63
- Foreman (with special area of competence) 43
- **Versicherungsfachwirt** (insurance) 35[63]

62 Index of recognized skilled occupations. Pub: Federal Institute for Vocational Training. 1986 edition, p. 249.

63 Translator's note: there are no exact English equivalents for **Bankfachwirt**, **Industriefachwirt**, **Handelsfachwirt** and **Versicherungsfachwirt**.

3.7 Supervision and control in the dual system

3.7.1 Supervision by the competent bodies

Pursuant to Article 45, para. 1 of the Vocational Training Act, the competent body supervises 'the implementation of vocational training and promotes it by advising employers (trainers) and trainees. To this end it has to appoint *training advisers*. Employers are required to provide the information needed for supervision, to produce records and to permit viewing of the training establishments'.

Training advisers are usually full-time employees, but it can also be a subsidiary or honorary occupation.

The qualifications required of a training adviser are:

- completed in-firm training with authority to act as a trainer, or
- a completed course of study at a **Fachschule**, a specialized college with university status or a university, which is appropriate for employment as a training adviser, or
- an equivalent qualification.

The number of training advisers employed by competent bodies varies from one to another, depending upon the size of the area covered by the Chamber, the number of trainees to be supervised, and the financial position on the body concerned.

The tasks of the training advisers are:

a) Advising the training firms on
   - pedagogic questions of training, such as the methodology of teaching and learning, use of teaching materials, dealing with young people,
   - the equipment of training places,
   - possibility of shortening the training period and accelerated admission to the final examination.

b) Advising the trainees on
   - rights and obligations arising from the training relationship,
   - questions concerning the training contract,
   - possibilities of shortening the training period,
   - accelerated admission to the final examination,

- possibility of extending the training period.

c) Supervision of the proper implementation of training. This covers, for example, adherence to

- the in-firm training plan,
- the ban on employing trainees on work unrelated to training,
- release for attending the Berufsschule and group training measures,
- the obligation to provide training materials free of charge,
- the relevant legal regulations and their application (Vocational Training Act, Young Persons (Protection of Employment) Act, Law on the Protection of Working Mothers, Law on the Protection of Workers, and other labour and social legal regulations),
- the obligation to appoint and use the services of trainers.

d) Fostering contacts with the training firms, the vocational schools, the industrial supervision authority and so on.

There are usually concrete reasons for advisory discussions and control visits. These can be:

- persistently poor examination results for trainees in a particular training establishment,
- intermediate examination results which give cause for concern,
- complaints made by the trainee or his parents,
- complaints made by the firm,
- complaints or concern expressed by the Berufsschule,
- new Training Ordinances.

If any deficiencies are established with regard to the personal and (or) technical suitability of the trainer/employer (Art. 32, para. 2, Vocational Training Act/Art. 29, para. 2, Crafts Code) and (or) the suitability of the training establishment (Art. 32, para. 2, VTA/Art. 29, para. 2, Crafts Code), the competent body can take the following measures:

- refuse to register a vocational training contract,
- cancel a vocational training contract,
- issue a directive requiring the implementation of supplementary training measures outside the training establishment (Art. 23, para. 2, VTA/Art. 23a, Crafts Code),

- set a time limit for remedying the deficiencies (Art. 23, para. 2, VTA/Art. 23a, Crafts Code).

In the case of the *crafts*, the competent bodies (Crafts Chambers) have, in addition to salaried employees acting directly on their behalf, 'training officers' (**Lehrlingswarte**). These are members of the committees of the guilds and their duties are similar to those of the Chambers' training advisers, but they act in an honorary capacity.

For settling disputes between training firms and their trainees

- arising from the training relationship,
- over the existence or non-existence of a training relationship,
- arising from negotiations about contracting a training relationship,
- arising from tortuous acts in so far as these are connected with the training relationship,

there are, pursuant to Article 111 of the Labour Court Law, special committees attached to the competent bodies (to the guilds in the case of the crafts) which have to be composed of equal numbers of employers and workers. These seek to arrive at an amicable settlement of the dispute, so that the training relationship may continue undisturbed.

3.7.2 Supervision by the state Trade Supervisory Offices

The state Trade Supervisory Offices (**Gewerbeaufsichtsämter**) are responsible for ensuring compliance with the Young Persons (Protection of Employment) Act. According to the Land concerned, they are responsible to either the Labour or Social Affairs Ministry.

These offices exercise supervision by, among other things, having their officials visit firms and carry out checks. In principle, every firm should be visited at least once a year but this happens only in the case of large concerns. Most checks are carried out because certain information has been received, or experience indicates that a visit should be made, or an official complaint has been made.

The Trade Supervisory Offices also pay particular attention to *health care* for young people, which includes trainees, in accordance with Articles 32-46 of the Young Persons (Protection of Employment) Act.

Article 32, para. 1 of this act lays down that a young person may be employed only if

1. he has been examined by a doctor within the last nine months (first examination) and
2. the employer has a certificate from that doctor. One year after the young person has started in his first job the employer must secure a doctor's certificate to the effect that the employee has been re-examined (first re-examination). This certificate may not be more than three months old... (Art. 33, para. 1).

The medical examinations must cover the young person's state of health and development and his general physical condition; in addition, the re-examination must cover the effects of the work upon his health and development (Art. 37, para. 1 of the Young Persons (Protection of Employment) Act). Thus the medical examinations under this act are, for the trainee, also a test of his fitness for his chosen occupation.

For skilled occupations for which training is given in certain undertakings (e.g. distribution of foodstuffs), Articles 17 and 18 of the Federal Epidemics Law apply.

3.7.3 Supervision of the *Berufsschulen*

Berufsschulen are subject to *state supervision* (Schools Inspectorate). In accordance with the cultural autonomy of the Federal Länder, Berufsschulen come under the supervision of the Minister of Culture of each Land. In most of the Länder, responsibility for the inspection of schools is delegated to subordinate authorities such as district authorities (e.g. in the Rhineland Palatinate), central education offices (as in Baden-Württemberg), or presidents of administrative districts (as in North Rhine-Westphalia).

3.8 Initiatives for reform within the dual system

3.8.1 The Basic Vocational Training Year

3.8.1.1 Basic vocational training and occupational fields

Pursuant to the Vocational Training Act of 1969, vocational training must impart '*broad-based basic vocational training*, and the knowledge and skills necessary for practising a skilled occupation, in a systematic course of training' (Art. 1, para. 2). Thus the basic vocational training which had been discussed sporadically in the 1950s and realized here and there in the 1960s was, for the first time, declared an integral and legally binding part of vocational training.

The *Basic Vocational Training Year* (BVY) is not prescribed by this regulation but derives partially from it. As regards learning organization and content it represents, to a certain extent, a special form of broad-based basic vocational training. It lasts one year and (while general education is continued) is aimed at imparting knowledge and skills which provide a common qualifying foundation for several more or less *'related' occupations*. These related occupations are known as *occupational fields* and these (e.g. commerce and administration, metal technology, electrical engineering) are thus *didactic frames* for the basic vocational training and the particular BVY. Thus the occupational fields have a *key function* for organizing the content of basic vocational training and the qualifying relationship between *basic vocational training* and *skill training*.

As occupational fields are formed by bringing together related occupations, there arises the question of relationship or similarity criteria. For the field of 'metal technology' this is the working material, metal, which is common to all these occupations, for 'electrical engineering' it is elec-

trical current as the provider of energy and 'working material', while in the occupational field of 'printing technology', the occupations are involved in the production of printed products.

As a *didactic construction*, basic vocational training is at present made up of thirteen occupational fields.

- I Commerce and Administration
- II Metal technology
- III Electrical engineering
- IV Construction
- V Wood technology
- VI Textile technology and Clothing
- VII Chemistry, Physics and Biology
- VIII Printing
- IX Color technology and Interior design
- X Health care
- XI Hygiene and Beauty care
- XII Food and Home economics
- XIII Agriculture

These occupational fields are laid down in the statutory instrument on the countability of the BVY published by the Federal Minister for Economics on 17 July 1978. This, the **Berufsgrundbildungsjahr-Anrechnungs-Verordnung**, replaced that of 4 July 1972 which listed only eleven occupational fields.

The occupational fields are divided pragmatically, drawing upon the recognized skilled occupations, which do, in fact, provide the reference framework for laying down occupational fields.

The occupational fields are not scientifically-based structures but the outcome of normative decisions and plausible considerations. From the aspects of both vocational training and vocational teaching, whether a field is 'narrow' or 'wide' is a matter of some importance. Those concerned more with direct occupational capability are more likely to favour narrow occupational fields, while those who attach special importance to occupational mobility tend to support wider fields. These basic attitudes have played a not inconsiderable role in the discussions on the demarcation of occupational fields, especially those between employers and workers. The '*subfields*' as laid down for some occupational fields in the statutory instrument on countability of

17 July 1978 are, in a sense, a compromise. Thus in the field of commerce and administration we find the sub-field marketing and customer advisory services with eighteen occupations and the sub-field office and business administration with seven. To quote another example, the field of metal technology has three sub-fields, namely production and cutting processes (forty-six occupations), installation and metal construction (twenty-four occupations) and motor vehicles (seven occupations). Changes are to be expected here, however, as a consequence of the new Regulation relating to vocational training in industrial metal-processing/metal-working occupations.[64]

3.8.1.2 Organizational variants of the Basic Vocational Training Year

There are *two main variants* of the BVY, the *full-time school-based* and the *cooperative* (dual system) forms.

The *full-time school-based* BVY (also known as the **Berufsgrundschuljahr** in some Länder) is part of the publicly-run education system and comes under the supervision of the Ministries of Culture of the Länder. Under the school laws the BVY is a *full-time form of the Berufsschule* and, as such, replaces the first year of on-the-job training/part-time attendance at the Berufsschule. In this form of BVY, not only are the *occupational-field-related* theoretical foundations imparted but also the basic skills (occupational practice). In addition, general education which is common to all the occupational fields (German, social studies, sport and religion) is continued. Young people who wish to embark on the full-time school-based type of BVY may do so only if they have completed the compulsory period of education. Those undergoing the *full-time school-based* BVY are *pupils only* and not, as in training under the dual system, simultaneously (Berufsschule) pupils and trainees.

In the *cooperative form* of BVY, the training firm and the Berufsschule collaborate. The young people have *training contracts* with the firms and are thus both *trainees* and Berufsschule *pupils*. The objectives and contents of both practical and theoretical training are, as in the full-time school-based BVY, directed towards imparting occupational-field-oriented basic training. So, for the first year of training, this is a variant of the dual system in which

- the time spent at the Berufsschule is extended to two or two and a half days a week,
- the contents are oriented not to a particular skilled occupation but to an entire *occupational field*.

3.8.1.3 Objectives of the Basic Vocational Training Year

The most important (and probably the most realistic) *objectives of the BVY* in either of these forms are

- a more pedagogic and systematic first phase of training,

64 cf. section 3.5.1.1.3., p. 86.

- ensuring a gradual transition from school to the world of work,
- facilitating a phased occupational choice, or deferment of a specific choice, as only the occupational *field* has to be decided upon initially,
- widening and 'despecializing' the first phase of training in order to increase occupational mobility,
- providing a firmer theoretical foundation for vocational training.

Achieving *phased occupational choice* has proved problematical, and this is true of both forms of BVY. In those occupational fields with sub-fields, the young person must decide on one of the latter after only six months and it has been found that a balanced judgment based on experience is difficult in these circumstances.

In the *cooperative form* of the BVY difficulties arise because the young person already has a training contract in which *one* particular *occupation* is specified, and while a change in the choice of occupation is not excluded, this rarely happens. And apart from this, the opportunities for arriving at a more rational decision at the end of a BVY appear to have been overrated. But here it must also be borne in mind that the shortage of training places in recent years led to a situation in which the main concern of many young people was – and indeed had to be – to find a training place at all. Another consequence of this situation is that in the full-time school-based BVY we find, in the main, those pupils who, because of their poor performance at school, have failed to find a training place. As training firms are not obliged to take young people who have successfully completed this form of BVY as trainees – in fact some employers have a negative attitude towards this type of BVY and its products – completion of such a BVY does not always mean an improvement in the young person's occupational prospects.

3.8.1.4 The problem of countability[65]

The statutory regulations concerning countability, which demarcate the occupational fields and their sub-fields, lay down in a legally binding form whether, and to what extent, basic vocational training as undergone in a BVY counts towards the total period of training in a recognized skilled occupation, and here it must be borne in mind that the problem arises only in connection with the BVY in its *full-time school-based* form.

Examples:

- When a young person has completed basic vocational training (which always lasts one year) in the occupational field 'Commerce and Administration', in particular the sub-field 'Marketing and Customer advisory services', then proceeds to complete his training as an airline clerk, the basic training counts in full towards his total training period as this occupation is assigned to the sub-field mentioned. Thus training lasts only a further two years, and not three.

65 Exists only with regard to the BVY in its full-time school-based form.

- When a young person in the occupational field 'metal technology' completes basic vocational training in the sub-field 'production and cutting', and then goes on to learn the trade of motor-vehicle electrician, he merely has six months deducted from his training period as this occupation is assigned to another sub-field, that of 'motor vehicles'. As a rule, therefore, he must continue to train for a further two and a half years.

- When a young person has undergone basic vocational training in the occupational field 'Metal technology', sub-field 'Installation and Metal construction', and then decides to become a compositor, his basic training does not count at all since it was in the field of Metal technology, which gives him no fundamental knowledge that can be utilized in this occupation, assigned as it is to the occupational field of 'Printing'.

Therefore this 'countability arithmetic' is based on the requirement that the basic training concerned must also be a basic qualification for the ensuing skill training.

But the statutory regulations on countability lay down yet another essential prerequisite for countability when basic vocational training takes place within the school-based organizational framework of the *Basic Vocational Training Year*. The BVY must, especially with regard to the apportionment of hours of instruction, accord with the Outline Agreement on the Basic Vocational Training Year decided by the Standing Conference of the Ministers of Culture on 15 July 1978. Among other things this regulates the number of hours of instruction, theoretical and practical, separately for each occupational field and its sub-fields the so-called *occupational-field-related learning area*. As a rule, twenty-six hours a week are devoted to this area, the minimum being twenty-four. This condition must be met if the BVY is to count towards subsequent vocational training.

3.8.1.5 Development trends

While in the early 1970s there was still a clear preference for the full-time school-based Basic Vocational Training Year, towards the middle of that decade a new trend became apparent and continued until the school year 1980/81.

During that period the number of pupils in the cooperative form showed a relatively greater increase than in the full-time school-based form. Since the school year 1982/83 there has again been a reversal of this trend.

Tab. 23 Number of pupils in the Basic Vocational Training Year[66] according to form of implementation, school year 1971/72 to 1985/86

School year	School-based form		Cooperative form	
	Absolute	Increase against previous year in %	Absolute	Increase against previous year in %
71/72	3 934			
72/73	6 837	+ 73.8	195	
73/74	12 002	+ 75.5	614	+ 214.8
74/75	16 248	+ 35.3	860	+ 40.0
75/76	20 136	+ 23.9	1 410	+ 63.9
76/77	23 145	+ 14.9	2 612	+ 85.2
77/78	32 767	+ 41.5	5 137	+ 96.6
78/79	45 063	+ 37.5	7 930	+ 54.3
79/80	57 004	+ 26.4	10 301	+ 29.8
80/81	62 649	+ 9.9	14 468	+ 40.4
81/82	76 938	+ 22.2	15 793	+ 9.1
82/83	83 036	+ 7.9	15 861	+ 0.4
83/84	86 082	+ 3.7	17 490	+ 10.3
84/85	84 986	- 1.3	16 780	- 4.0
85/86	78 012	- 8.2	14 473	- 13.7

In some Federal Länder the numbers in the cooperative form of the SVY have even declined – as in Bavaria, Hessen, the Rhineland Palatinate and Schleswig-Holstein. The fact that the cooperative Basic Vocational Year is, in general, expanding less rapidly than the school-based form is quite remarkable, since in recent years industry and commerce have always emphatically advocated the former, while the trade unions have been divided over this issue for some time. The Berufsschule teachers' associations, on the other hand, unequivocally favour the expansion of the full-time school-based BVY. The Basic Vocational Training Year has become a very sensitive barometer for the various currents of opinion one encounters in the Federal Republic of Germany when it comes to vocational training policy.

An important criterion for the *level of expansion* of the BVY (school-based and cooperative) is the percentage of pupils in both forms in relation to the total number of trainees in the first year of training. The following table shows developments up to 1985/86, when the average for the Federal Republic was 17.%, a drop over 1982/83.

66 Glaser, P. and Brigitte Schmidt-Hackenberg: Das Berufsgrundbildungsjahr im Schuljahr 1982/83. Pub: Federal Institute for Vocational Training, Berlin (year not given), Tab. 1. From 1983/94: Basic and Structural Data 1986/87, p. 45.

Tab. 24 Number of pupils in the Basic Vocational Training Year (school-based and cooperative) in relation to the number of trainees in the first Year of training

School Year	Trainees in first year of training[68] (in thousands as of 31.12.)	Pupils in the BVY (both forms)[69]	%[67]
1978/79	512,1	52 993	10,3
1979/80	528,5	67 305	12,7
1980/81	529,7	77 117	14,6
1981/82	475,0	92 731	19,5
1982/83	497,9	98 897	19,9
1983/84	543,7	103 572	19,0
1984/85	558,6	101 766	18,2
1985/86	544,1	92 485	17,0

A breakdown according to Länder shows that in the Saarland in 1977/78, 30.3% of the young people concerned were already undergoing a BVY; in the Rhineland Palatinate the figure was 20.5%, in Berlin and Hamburg 11.5% and 11.2% respectively, while Hessen had reached the Federal average of 8.2% in 1977/78.

3.8.1.6 Special forms of the Basic Vocational Training Year

In some Länder special forms of the BVY have been developed and tried out for *young people with learning difficulties* during the last few years. These are *full-time* and, like the normal form, last one year but have a different objective. These pupils have learning disturbances, behavioural disturbances or they are slow learners and they should and must, above all, be made *willing and able to undergo training*, or at least able to work. Some pupils are also enabled to acquire the special school or Hauptschule leaving certificate belatedly.

Thus the aim of this BVY is not – indeed, in view of the learning problems of its pupils it cannot be – occupational-field-oriented basic vocational training which can count towards subsequent training within the dual system. The primary aim is to motivate them to work, and try out practical work, and to orientate them in particular parts of various occupational fields. And while there can be no serious objections to these aims and the concept of these special forms of the BVY there is, nevertheless, criticism of the fact that they, too, have been given the designation 'Basic Vocational Training Year'. Critics fear that this will lead to a watering-down of the BVY as a *reform initiative for vocational training* within the dual system and therefore make it less attractive not only to the training firms but among the young people themselves. In view of the tasks it undertakes, some regard '*Vocational Preparation Year*' as a more fitting appellation for the BVY in its special forms. In some Länder, like North Rhine-Westphalia for example, such a vocational

67 Authors calculation

68 Basic and Structural Data 1986/87, p. 94.

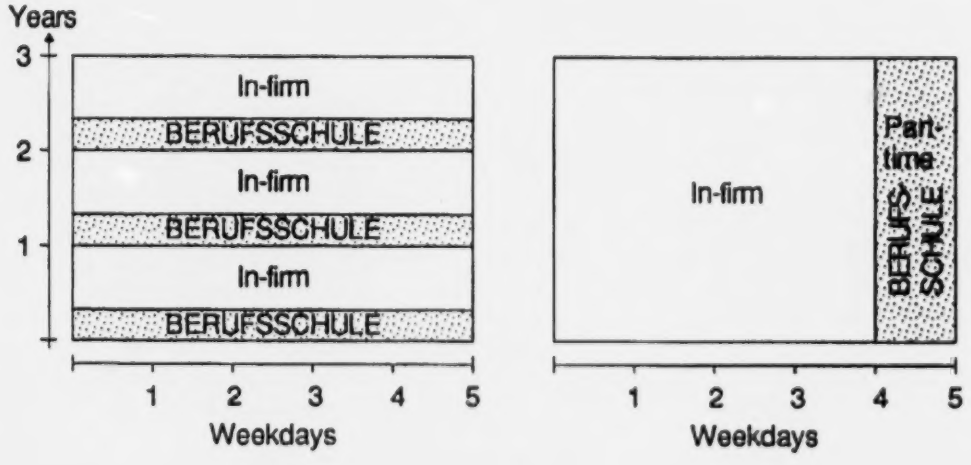
69 Glaser, P. and Lemke, J.G.: Das Berufsgrundbildungsjahr BGJ, Schuljahr 1985/96. Pub: Federal Institute for Vocational Training, Berlin 1986, p. 4.

preparation year exists, but is not primarily intended for the educationally subnormal, having been introduced for all young people who, on completing compulsory education, have been unable to enter into a training relationship. Quite apart from the problems of designation and assignation, it is generally recognized that the vocational training of those with learning difficulties is an important task for the vocational schools too. Recommendations and concepts for entirely abandoning special forms of the BVY and to offset the varying learning standards and behavioural patterns of pupils through *internal differentiation* have not as yet come to anything.

3.8.2 The block system

'Block system' is the name recently given to a new variant of alternating learning processes on the job and in the Berufsschule. In the 'classical' form of the dual system trainees attend the Berufsschule as an 'accompaniment to training', that is on one or two days a week throughout the entire training period. In the block system, however, longer (usually several weeks) *Berufschule blocks* alternate with *in-firm blocks*. Therefore the young person is, for quite long periods, either exclusively a Berufsschule pupil or a trainee on the job. The following diagram illustrates the difference between this and the traditional organizational form of learning at the Berufschule and on the job.

Fig. 21 Berufsschule instruction organized on the block system and on the part-time system



Here and there the block system has already existed for some decades to cater for the so-called 'splinter occupations'. In these cases it was possible to create specialized classes for occupations having few trainees by concentrating apprentices from a large region, in certain circumstances from an entire Federal Land, in one spot. But this, of course, meant that the young

people could not attend the Berufsschule on one or two days a week. Therefore, for very *pragmatic reasons*, the trainees were taught by the *block system*, usually in association with a boarding school. Now that block instruction at the Berufsschule, and thereby block instruction as a whole, is being promoted quite apart from such needs, the assumption is being made that, with its aid, improvements in the vocational training system can be brought about.

The proponents of block instruction expect from it the following main advantages:

- easier and better coordination of the organization and harmonization of the contents of the learning processes in the Berufsschule and the training firms;
- improved planning conditions for both group and in-firm training because of the creation of 'enclosed' in-firm blocks free from 'interruptions';
- improved planning conditions for the learning processes of the Berufsschule;
- increased use of diverse methods of instruction and media to promote learning motivation and learning behaviour.

While these possibilities and objectives are variously assessed, it is not disputed that the organizational conditions for learning are substantially changed by the block system, both in the Berufsschule and on the job. The duration of the *school blocks*, and therefore of the in-firm blocks, varies from Land to Land and, in certain circumstances, from one Berufsschule to another and one skilled occupation to another. It ranges from two weeks to thirteen and there are also varying regulations with regard to the *number* and sequence of school blocks (and, consequently, in-firm blocks) per year. The extent to which the block system is used also varies from Land to Land, sometimes substantially; it is relatively widespread in North Rhine-Westphalia and in the Rhineland Palatinate.

The attitudes of *the occupational associations* to the block system also vary, depending upon the kind of occupation and firm which they represent. Difficulties in adjusting, which tend to give rise to reservations, are more frequently met in the crafts and in small industrial and commercial undertakings. As a rule the competent Ministries of Culture do not introduce the block system against the wishes of the occupational associations concerned. Experience has shown that the associations or bodies representing the interests of the individual occupations usually agree to the introduction of the block system when they are satisfied that it brings no additional disadvantages as far as vocational training policy is concerned (such as an increase in the total time spent at the Berufsschule).

Most *Berufsschule pupils and teachers* approve of, and therefore accept, block instruction, even though various empirical findings show that the possibilities of block instruction, compared with part-time instruction, are overrated and too much was expected of it. Nevertheless, it is fairly safe to predict that block instruction at the Berufsschule, and therefore the block system generally, will continue to grow.

A less common variant of the block system is known as *'firm-related phased instruction'*. The essential difference between this and ordinary block instruction is the reorganization of both the

content and chronology of training. For example, the entire training period for an industrial clerk is divided into five phases which correspond to the basic functions of an industrial firm: materials, production, marketing, costing and accounting. In each phase, full-time training in the firm is preceded by full-time attendance at the Berufsschule; through the preliminary acquisition of these occupation-specific basic knowledge and skills the young person is prepared for the work processes within the firm. The results of pilot schemes – which are still few in number – to date have proved encouraging for the introduction of 'firm-related phased instruction' in a modified form for training in other clerical occupations.

3.8.3 Graduated training

The structure of every system of education and training, not only in the Federal Republic of Germany, is characterized by, among other things, the type, number and duration of its *stages*. An educational stage represents not only the completion of a course but also the basis and prerequisite for the next one. This is also true of vocational training. The vocational education path[70], as we have seen, displays a particularly wide variety of stages and graduation. When *graduated training* is discussed in the following pages the author will be referring exclusively to *apprentice training*.

It will be recalled that in Article 1, para. 2 of the Vocational Training Act the legal requirement is formulated that every vocational training course must consist of a *basic training stage* and a *skill training stage*.

But the Vocational Training Act also provides for a substantially more far-reaching system of *training by stages*. 'At the end of the individual stages a trainee can take an examination which, if he passes, enables him to take up employment corresponding to the standard of training reached, or he can continue vocational training in further stages' (Art. 26, para. 1). In this connection the following stages are specified:

- *basic vocational training* as a broad foundation for subsequent skill training (Art. 26, para. 2)
- building upon this, *general skill training* (Art. 26, para. 3)
- further stages of *specialized skill training* (Art. 26, para. 4).

Even before the passing of the Vocational Training Act a series of plans and models for graduated training had been developed and tried out. While the **Braunschweiger Plan** of 1948 has remained a model for further discussion, the following are in the experimental stage:

- the **Krupp** outline plan of 1962/65
- the **ABB** plan for fitters 1963/65[71]

---

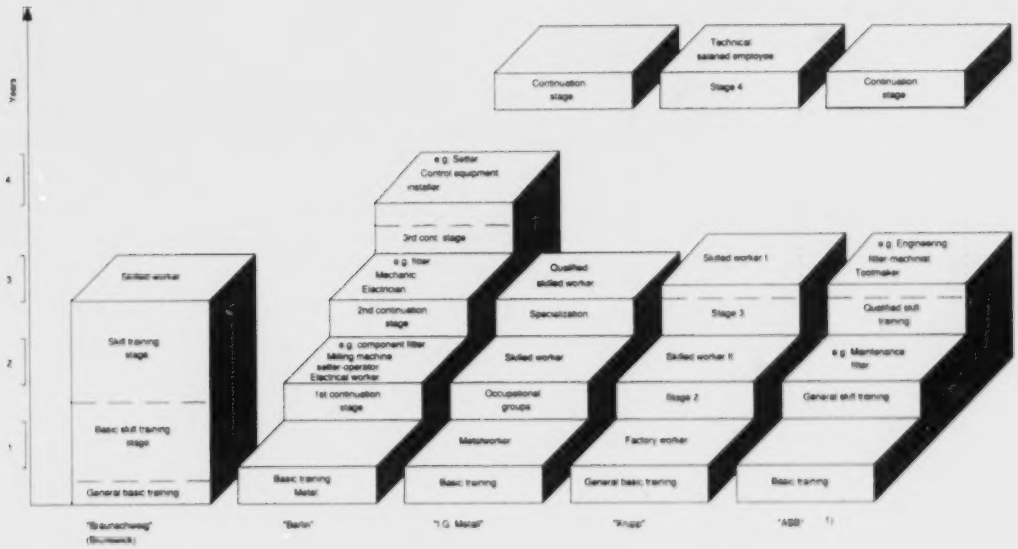
70 Cf. p. 133 et seq.

71 Arbeitsstelle für betriebliche Berufsausbildung = ABB (Office for In-firm Vocational Training).

- the **IG-Metall** plan of 1964/66
- the **Berlin** plan (Metal/Electro-technology) of 1964

A diagram of these plans is given overleaf.

Fig. 22 Plans for graduated training



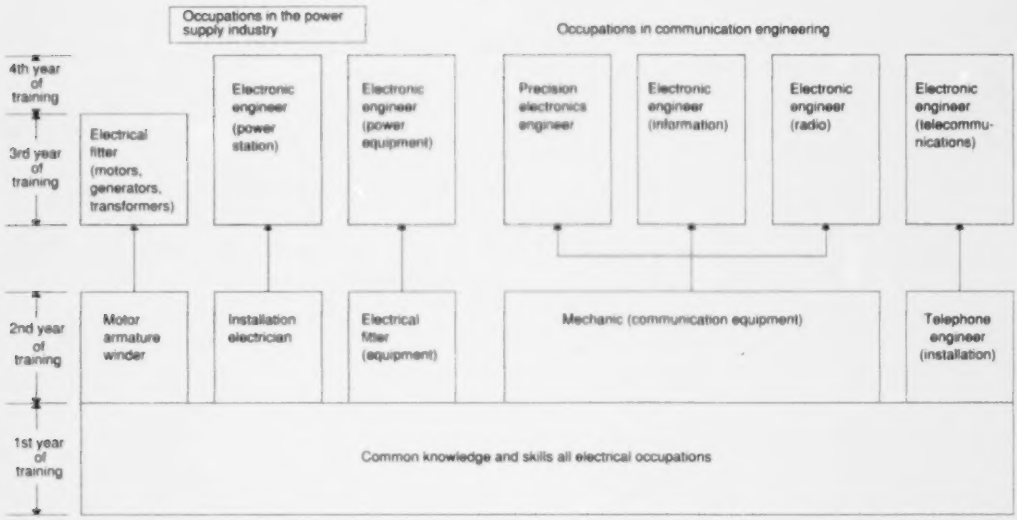
1) ASB = Arbeitsstelle für betriebliche Berufsausbildung (Office for Inform Vocational Training)

It was hoped that, with the aid of graduated training, more could be done to achieve the following objectives of vocational-pedagogic and training policy:

- Better adjustment of vocational training to the various aptitudes and talents of young people (traditional vocational training within the dual system has only one level of qualification).
- Promotion of occupational mobility through broad-based basic training and specialization by stages.
- Rationalization of training (e.g. by having larger groups for instruction) by bringing together separate but related training courses to form occupational fields.
- Partial deferment of occupational choice on the basis of occupational experience.

Taking as an example the 'Ordinance on vocational training in Electrotechnology' the diagram on p. 176 shows the structure of graduated training.

Fig. 23 Graduated training for occupations in electrotechnology[72]



But the high hopes that attended the introduction of graduated training have been fulfilled only to a limited extent. There was a tendency to move young people to higher stages of training mainly to suit the requirements of the firms. Moreover, the degree to which the qualification needs of the firms would coincide with the learning capability and learning needs of the young people had been overestimated. Another critical issue, especially from the trade union point of view, is that the semi-skilled occupations abolished before the introduction of graduated training are, in effect, reappearing. This happens, for instance, when young people, after the first stage of training, do not proceed to the next stage, or cannot do so because not enough training places are available for the second stage. This is also the case in graduated training in electrotechnology, which is given as an example here.

For this reason, a new Training Ordinance[73] was issued on 14 January 1987 in which provision was no longer made for the concept of graduated training. Accordingly, training is now provided for the occupations of

- electrical fitter, male/female, without specialization
- electronics technician (energy), male/female with specialization in
  a) plant technology
  b) plant operations/maintenance

72 Cf.: Bundesanstalt für Arbeit (Pub.): Blätter zur Berufskunde I–II B102, Nuremberg 1975, p. 2.

73 Regulation on vocational training in electrical occupations (industry) for electronics technician (communications), male/female, with the German Post Office of 14 January 1987. Federal Law Gazette, Section I, 22 January 1987, No. 5, p. 199 et seq.

- electrical fitter (industry), male/female with specialization in
  a) production technology
  b) machinery/appliances

- electronics technician (communications), female with specialization in
  a) information technology
  b) information technology
  c) radio engineering

Training for all occupations for which there is an additional specialization covers 3 1/2 years. Lengthy consultation continued over many years between the Central Association of the Electrotechnical Industry - Employers Association for the Metal Industry on the one hand and the Metal Workers Union (Industriegewerkschaft Metall) on the other - were necessary before graduated training in the electrotechnical occupations could be dispensed with and a new regulation issued. The decisive breakthrough occured on 18 September 1981 with the approval of the "joint objectives for the further development of industrial electrical occupations". It then took a further five years before the new Training Ordinance was approved.

4. THE VOCATIONAL SCHOOLS

4.1 Introduction

The vocational school system is highly complicated and differentiated – and not only because it comprises five types of school. In addition we find variations – at times numerous – within these five types and, quite often, differences between one Federal Land and another. In the following pages the author will, for the reader's sake, refrain from recounting all the details of these variants while attempting, in a relatively limited space, to convey and elucidate the essential features. The Berufsschule, as one of the five forms, will not be dealt with again here.[1]

In differentiating between vocational schools whose primary task it is to impart a *vocational qualification* and those where a course culminates in the acquisition of a *qualifying or entrance certificate* (e.g. the entrance certificate for admission to a specialized college with university status – the **Fachhochschulreife**), the author will not be following any 'official' division. Rather does this grouping take into account the dual meaning of 'vocational education' and 'vocational schools' which is a characteristic of the history of the German education system and peculiar to the Federal Republic of Germany.

The first group, i.e. the vocational schools which concentrate on vocational qualifications, and to which the Berufsschule belongs, is regarded as having a distinct *objective*. These are schools whose primary task it is to qualify young people *for* an occupation. In the second case, that is the vocational schools whose main task it is to award qualifying certificates (like the general-education schools), 'education' is in the foreground and, allied with this, a qualification to proceed further along the path of education and training *through* the inclusion of vocational contents. But it has to be noted at the outset that the vocational or vocation-related learning contents at these schools (**Berufsaufbauschule, Fachoberschule, Berufliches Gymnasium**) occupy only a subordinate role in comparison with the traditional general contents. The intellectual, historical and educational reasons for this are very complex and will not – indeed should not – be gone into here.

4.2 Vocational schools which primarily impart vocational qualifications

4.2.1 Berufsfachschulen

According to the definition published by the Standing Conference of the Ministers of Culture, Berufsfachschulen are 'schools which provide full-time instruction lasting at least one year and which do not demand vocational training or occupational experience as a prerequisite for admission. Their task is to provide general and specialized (skill) learning contents and enable the pupil to acquire a qualifying certificate in a recognized skilled occupation, or a part of vocational training in one or more such occupations, or a vocational qualification which can be gained only at school'.

---

1 See, in particular, pp. 94 et seq. and 102 et seq.

There are three types of Berufsfachschulen:

I: Those at which a *qualifying certificate* in a *recognized skilled occupation* can be acquired.

II: Those where attendance *counts towards the training period* in a recognized skilled occupation.

III: Those where a pupil can gain a vocational qualification which can be acquired *only* through attendance at a *school*.

Recognition of the countability of attendance at a Berufsfachschule towards the period of training in a recognized skilled occupation (Type II) is regulated by the statutory instrument governing countability dated 17 July 1978.[2]

Corresponding to branches of the economy and occupations, there are Industrial-Technical, Clerical-Administrative, Home Economics-Social Care Berufsfachschulen, also schools for languages, music, chemistry and so on. Berufsfachschulen which enable a pupil to qualify for a recognized skilled occupation (Type I) and those bestowing a vocational qualification which can be acquired only at a school (Type III), usually offer three-year courses. The latter are comparatively rare. In the Federal Republic at present there are only seven Berufsfachschulen where pupils can qualify for a skilled occupation in the metal industry.

The great majority of Berufsfachschulen are of the Type II kind and among these there is a preponderance of the clerical-administrative variety (known as commercial schools) and those providing training for home economics – social care occupations. The pupils are mostly girls, which means that the proportion of girls (two-thirds) in the total number of Berufsfachschule pupils is exceptionally high.

Some of the two-year Berufsfachschulen (they can also be one-year) enable pupils to acquire the intermediate school certificate (**Mittlerer Bildungsabschluss**) and these are known as Berufsfachschulen having an 'extended learning objective'.

Berufsfachschulen are, as a rule, *full-time schools*; not only do they – according to their basic orientation – provide specialized theoretical and practical education but they also continue *general education* with subjects like German, foreign languages, history, the natural sciences and so on. In 1979 there was a total of 2 824 Berufsfachschulen in the Federal Republic and over recent years the number of pupils at these schools has risen steadily.

2 Precise title: Verordnung über die Anrechnung auf die Ausbildungszeit in Ausbildungsberufen der Gewerblichen Wirtschaft – Anrechnung des Besuchs eines schulischen Berufsgrundbildungsjahres und einer *einjährigen Berufsfachschule*.

Tab. 25 Number of pupils at Berufsfachschulen[3]

Year	Number of pupils (in thousands)	
	Total	Females included in the total
1970	205.0	124.4
1972	236.7	145.8
1974	272.5	174.0
1976	279.2	189.4
1978	321.4	219.1
1979	339.2	227.9
1980	352.1	233.5
1981	370.7	243.2
1982	397.0	261.5
1983	404,3	268,1
1984	398,8	265,0
1985	392,1	257,9

Whether this increase in the number of pupils at Berufsfachschulen will continue is uncertain, to say the least. For one thing there is the fact that establishing Types I and III means high investment in workshops and so on; also Type I might become less attractive if, one day, the compulsory education period is extended to ten years in all the Federal Länder, a possibility which cannot be excluded.

The **Hauptschule** leaving certificate is usually required for admission to a Berufsfachschule and there are, in smaller numbers, what are known as **höhere Berufsfachschulen**, which admit only pupils holding the intermediate school certificate.

A recent study[4] provides information about the *motives* for attending a Berufsfachschule and, at the same time, deals with the relationship between these schools and the dual system. According to this, many young people attending one-to-two-year Berufsfachschule courses do not regard this entirely school-based training as a real alternative to training within the dual system. It is true that most Berufsfachschule pupils attend the schools as a first choice for their vocational preparation and more rarely because they have failed to find a training place; the majority of them seek on-the-job training at the end of their school course. About two-thirds of the pupils at one-year Berufsfachschulen and nearly 70% of those at the two-year kind want to continue their training within the dual system. It will be recalled that the one-year and two-year schools (Type II) are those which do not normally bestow a *recognized vocational qualification*, such as can be acquired in the dual system. The picture is different among pupils at three-year Berufsfachschulen (Types I and III); of these, only 31.5% aim at subsequent in-firm training. This is understandable when one considers that most of these schools enable young people to

3 From: Basic and Structural Data 1986/87, pp. 27 and 33.

gain a *full vocational qualification* in a recognized skilled occupation or in one of those occupations which are not covered by the dual system.

It will be seen from their numbers alone that the Berufsfachschulen are not in competition with the dual system – rather do they have an important supplementary function.

4.2.2 Fachschulen

In the official language of the Standing Conference of the Ministers of Culture[5], Fachschulen are 'schools which basically demand completion of an appropriate course of vocational training or corresponding practical experience as a condition of admission; practical experience in the occupation for which training has been given is usually another prerequisite. They provide more extensive skill training and promote general education. Courses at full-time Fachschulen normally last at least one year, while at the part-time Fachschulen they are correspondingly longer'.

The distinctive features of Fachschulen are:

- their pupils have already completed vocational training (or had corresponding occupational experience),
- the pupils with vocational training have usually had occupational experience,
- they provide more extensive skill training,
- their courses last, as a rule, at least one year.

Of all the vocational schools, the Fachschule is the one that has most variants and differentiation. This applies not only to the duration of the courses, which can vary considerably (but always last at least one year) or the fact that quite a number of Fachschulen are part-time, especially in the form of evening schools. This wide variety is due mainly to the fact that the Fachschulen are in very close touch with developments in technology and the economy generally, and therefore sensitive to their qualifying requirements. Thus we find, in the Fachschulen of North Rhine-Westphalia alone, 60 specialized subjects and 35 points of emphasis. This is why the Fachschule field, with its 2 910 schools (1979) may well give the impression of being something of a Jungle, which makes it difficult to grasp an overall picture. But, as already mentioned, this is difficult to avoid. Nevertheless, considerable efforts are being made to achieve greater transparency and a better overview of this field through organizational schemes. In

4 Westhoff, G. and Mahnke, H.: Ausbildungs- und Berufswege von Absolventen beruflicher Vollzeitschulen, Heft 20 in the series Materialien und Statistische Analysen zur beruflichen Bildung issued by the Federal Institute for Vocational Training Research, 1980.

5 Designations of Vocational Schools – Decision of the Standing Conference of the Ministers of Culture dated 8.12.1975. Cf. Documentation, No. 1.

North Rhine-Westphalia[6] we find the Fachschulen divided into types which arise directly from the needs of society and the economy:

Technology
Economics
Food (production and distribution) and Home Economics
Socio-pedagogics
Design
Agriculture

The Fachschulen are categorized according to the *specialized subjects* taught, and to keep the number of these within bounds, *points of emphasis* are formed within a particular subject. This results, for example, in the following structure for the Technology type:

Type	Specialized subject	Emphasis on:
Technology	Mechanical Engineering	Development Production
	Informatics	Precision technology System analysis Computer-controlled systems

At Fachschulen the examinations are mainly *state* examinations. The occupational designation resulting from passing the examination is oriented, as a rule, not to the subject or point of emphasis concerned but to the type of Fachschule attended. This means, for example, that someone who has attended a Fachschule of the Technology type and passed the examination in mechanical engineering, with the emphasis on production, becomes a 'Technician' or 'State-examined technician'.[7]

As has already been mentioned, the essential prerequisite for admission to a Fachschule is normally a completed course of vocational training. But there are certain exceptions, in particular the Public Health Fachschulen (such as those for medical technologists); but in most of these a special qualification, the intermediate school certificate, is demanded.

Quite a number of Fachschulen are part-time or evening schools, and this enables pupils to attend without interrupting their normal work. This is particularly important in times of economic recession, when attending a full-time Fachschule might mean that a young person could not return to his old job, or have difficulty in finding a new one. Nevertheless, it is apparent that the Fachschulen and the numbers of their pupils are, to a certain degree, dependent upon economic trends, as the following figures show.

---

6 Neuordnung des beruflichen Schulwesens NW, Strukturförderung im Bildungswesen des Landes Nordrhein-Westfalen, a series published by the Minister of Culture, Heft 22, Ratingen/Kastellaun/Düsseldorf, 1973.

7 In certain Länder.

Tab. 26 Pupils at Fachschulen[8]

Year	Number of pupils (in thousands) Total	Females included in total	Part-time pupils incl. in total	Females incl. in part-time pupils
1960	141.8	65.8	14.9	–
1965	145.9	73.3	15.8	–
1969	181.7	99.1	15.9	–
1970	167.5	94.0	14.0	–
1972	193.0	105.0	7.3	–
1974	214.3	126.5	4.1	–
1975	211.1	124.5	6.2	0.7
1976	186.4	118.2	6.9	2.5
1977	171.0	115.7	7.8	2.9
1978	173.6	117.7	8.6	3.2
1979	181.4	120.8	10.2	3.8
1980	192.0	125.1	11.6	4.4
1981	203.7	130.5	13.4	5.0
1982	207.1	133.3	13.5	4.7
1983	205.5	134.4	14.1	4.4
1984	207.6	137.2	16.0	4.5
1985	213.8	140.9	20.2	6.2

No statistics available

The year 1975 marked the beginning of a period of slow economic growth and rising unemployment; since then the numbers of Fachschule pupils have been either falling or static. Such a situation has its dangers for the country's economy, since an economic upturn usually demands a greater, and not a reduced, qualification potential.

Because of their high degree of specialization the Fachschulen generally permit only very *limited lateral mobility* vis-à-vis other education/training courses and institutions. Such mobility is, however, a recognized objective of social and educational policy in the Federal Republic of Germany.

From the discussions on this subject one problem, in particular, has emerged for the Fachschulen, namely the extent to which the final certificates gained at these schools, or certain of them, could or should also be accepted as entrance certificates for specialized colleges with university status (**Fachhochschulreife**), and the extent to which this could be ensured by making special didactic provisions, such as organizing supplementary courses. But apart from a few isolated instances, this concept has not yet been realized. For example, the final certificate from the Fachschule for Food and Home Economics in Hamburg entitles the holder to proceed to that city's specialized college with university status. In North Rhine-Westphalia the Fachschulen – depending upon the demand – provide additional courses in general subjects. The examination for this entrance certificate is an entirely external one, in which type-specific contents are taken into account.

8 From: Basic and Structural Data 1986/87, pp. 27 and 33.

4.3 Vocational schools which primarily confer qualifying (entrance) certificates

4.3.1 Berufsaufbauschulen

To quote once more from the Decision of the Standing Conference of the Ministers of Culture dated 8 December 1975, these are 'schools which are attended – in addition to a Berufsschule, of following completion of compulsory attendance at a Berufsschule – by young persons who are undergoing, or have completed, vocational training. They provide general and specialized theoretical instruction which extends beyond the objectives of the Berufsschule and the course culminates in the **Fachschulreife**, which is equivalent to the intermediate school certificate gained at a **Realschule**. The course lasts at least one year full time and correspondingly longer part time'.

The following features of the Berufsaufbauschule explain and amplify this definition:

- There are both full-time and part-time Berufsaufbauschulen.
- Courses at the full-time kind last at least a year and are attended by young people who have already *completed* vocational training, which usually means training within the dual system.
- Courses at part-time Berufsaufbauschulen normally last three years and are taken by young people who (as apprentices) are undergoing *vocational training*. Thus these pupils, who normally attend on two evenings a week and Saturdays, are *at the same time* in-firm apprentices and Berufsschule pupils.
- Berufsaufbauschulen impart general and specialized theoretical instruction which goes beyond the objectives of the Berufsschule, and here traditional general education (i.e. subjects taught in general-education schools) is predominant.
- The Berufsaufbauschule enables a pupil to acquire the 'Fachschulreife', which equates to the intermediate certificate gained at the Realschule.
- Berufsaufbauschulen provide instruction in several fields (e.g. Industrial-Technical, Commercial, Home Economics-Social Care).

The organizational and didactic structure of the Berufsaufbauschule cannot be set out and described in detail here; they are laid down in outline agreements decided by the Standing Conference of the Ministers of Culture:

- Outline agreement on the establishment of Berufsaufbauschulen (development courses) in the vocational school system, dated 24/25 September 1959.
- Second outline agreement concerning the Berufsaufbauschule. Decision of the Standing Conference dated 4 February 1965.

- Recommendations for the instruction to be given at Berufsaufbauschulen. Decision of the Standing Conference dated 18 March 1970.

The original concept was that the Berufsaufbauschule should occupy a central role within the framework of the '*vocational educational path*'[9] or 'second educational path'. For trainees and young workers with only Hauptschule education it represented an opportunity to proceed to schools of engineering or higher schools of economics (these no longer exist) where they could gain the qualifying certificate for admission to an academic university. But various empirical studies of the Berufsaufbauschule have shown that it has only partially fulfilled this function, namely that of enabling, above all, working-class children to go on to higher education through occupational experience and vocational education. Quite a number of the pupils already held the intermediate school certificate and had, therefore, reached a standard of education which is normally acquired by attending a Berufsaufbauschule. So, for these young people, who already satisfied the conditions for admission to a school of engineering or higher school of economics, the main function of the Berufsaufbauschule was to give them a better starting position in these schools. And lastly, it was also established that a considerable proportion of Berufsaufbauschule pupils came from middle-class homes. To this extent there was some justification for the allegation sometimes made that the schools were a kind of social reserve mechanism for young middle-class people who, for whatever reason, had not proceeded along the 'first' educational path or failed to complete it.

The main reasons for the *distinct decrease* in the number of pupils at Berufsaufbauschulen over the past decade are:

- When, in 1968-69, the schools of engineering and higher schools of economics became specialized colleges with university status and, at the same time, **Fachoberschulen**[10] were created, the Berufsaufbauschule lost its central position within the framework of the vocational educational path.

- As a result of the educational policy pursued over the last fifteen years, more and more children and young persons are attending the secondary schools of the 'first' educational path (Realschule, Gymnasium), where they acquire the intermediate school certificate, or the entrance certificate to a specialized college with university status or an academic university. The number of school-leavers holding the intermediate certificate, for example, rose from 93 800 in 1965 to 348 800 in 1985.[11] This accounts for the fall in the number of young people who see in the Berufsaufbauschule an opportunity to gain the intermediate certificate or the **Fachschule** entrance certificate.

---

9 Cf. p. 133 et seq.
Beruflicher (or Zweiter) Bildungsweg – vocational (or second) educational path – is a blanket term for courses of education for acquiring the university entrance certificate within the framework of vocational secondary schools and/or special institutions such as Kollegs; students hold either the Hauptschulabschluss or the Mittlerer Bildungsabschluss and have completed vocational training or had equivalent occupational experience.

10 See next section.

11 From: Basic and Structural Data, 1986/87, p. 64.

Tab. 27 Number of pupils at Berufsaufbauschulen (in thousands)[12]

Year	Total	Females included in total	Part-time pupils incl. in total	Females included (part-time)
1965	53.0	5.6	41.6	2.7
1968	60.0	7.9	43.8	3.8
1969	51.6	8.1	35.6	3.5
1970	40.4	7.5	27.0	3.1
1972	36.8	6.9	21.7	3.5
1974	31.7	6.8	17.0	3.0
1976	22.6	5.6	10.5	2.1
1978	16.1	4.1	6.9	1.3
1979	17.6	5.8	6.0	1.0
1980	21.7	6.5	5.7	1.0
1981	22.8	6.8	4.1	0.7
1982	20.9	6.1	3.3	0.5
1983	15.7	4.7	2.3	0.3
1984	12.2	3.9	1.9	0.3
1985	9.8	3.1	1.6	0.2

In addition to the substantial decrease in the total number of pupils at Berufsaufbauschulen, the table also shows the following developments. Whereas originally – in terms of numbers of pupils – the part-time form predominated strongly, the position is now reversed. The number of pupils at full-time schools is far greater than those attending the part-time form. The main reason for this lies in the fact that attending a part-time Berufsaufbauschule in addition to in-firm training and compulsory attendance at the Berufsschule was simply too much for many young people and resulted in high drop-out and examination failure rates.

The proportion of girl pupils at these schools rose rapidly from 10.6% in 1965 to 31.6% in 1985,[13] a development related to changes in the fields covered by the schools. Whereas, originally, there was only the Industrial-Technical kind of Berufsaufbauschule, in the meantime the Commercial, Home Economics-Social Care and Socio-Pedagogic types have been established, but these are attended mainly by girls.

4.3.2 Fachoberschulen

The Fachoberschule owes its existence to the conversion, in 1969, of the former **Höhere Fachschulen** (schools of engineering and higher schools of economics) into specialized colleges with university status. They were founded as 'feeder' schools for the colleges as the intermediate school certificate (gained at the Realschule), in this case the entrance certificate conferred by the Berufsaufbauschule, was regarded as inadequate – and the general university entrance certificate conferred by the Gymnasium as unnecessary – for admission to these colleges. The

12 Ibid., pp. 25 and 31.

founding of the Fachoberschule is based on the 'Supplement to the Agreement between the Länder of the Federal Republic of Germany to achieve uniformity in educational affairs' dated 28 October 1964 (the Hamburg Agreement)[14] and the 'Outline Agreement concerning the Fachoberschule' decided by the Standing Conference of the Ministers of Culture on 6 February 1969.

Like the other vocational schools, the Fachoberschulen are defined in 'Designations of Vocational Schools' (Decision of the Standing Conference of the Ministers of Culture dated 8. December 1975). According to this they are schools 'which – building upon the basis of a Realschule leaving certificate or an equivalent qualification – impart general and specialized theoretical and practical knowledge and skills, and enable pupils to acquire the entrance certificate for a specialized college with university status. In the eleventh class theoretical and practical skill training is given and attendance can be replaced by appropriate vocational training. In the twelfth class, instruction is normally full time; if given in part-time form it lasts at least two years'.

The following features characterize the Fachoberschule:

- The prerequisite for admission is the intermediate school certificate (from the Realschule) or the Fachschulreife (from the Berufsaufbauschule).

- Attendance is for two years, covering classes 11 and 12.

- Pupils can acquire the entrance certificate for a specialized college with university status.

- Whereas the intermediate school certificate can be gained, at the earliest, after ten years at school and the general (academic) university entrance certificate, normally, after thirteen years, the certificate for admission to a specialized college is conferred after a minimum of twelve years at school.

- The didactic structure of the Fachoberschule is determined by general and specialized theoretical and practical knowledge and skills.

- The 'general knowledge' corresponds largely to the range of subjects taught at general-education schools (Realschule, Gymnasium) and form by far the greater part of the instruction in the twelfth class.

- Theoretical specialized (skill) knowledge is imparted mainly – and practical skills exclusively – in the eleventh class. The practical training usually takes the form of *practical work experience* on four days each week. If a pupil can show that he has undergone appropriate vocational training he can be exempted from attendance at the eleventh class.

- There are Fachoberschulen for particular fields, such as Technology, Commerce, Design, Home Economics/Socio-pedagogics and Agriculture.

---

13 Ibid., p. 35.

14 Hamburg Agreement: Abkommen zwischen den Ländern der Bundesrepublik Deutschland zur Vereinheitlichung auf dem Gebiet des Schulwesens vom 28.10.1964.

- The specialized knowledge and practical skills are oriented in content to the type of Fachoberschule.

The organization, didactic structure and objectives of the Fachoberschule are manifestly determined by the conferment of an entrance certificate, appropriate specialized knowledge and practical skills being part of this qualification. For example, it is assumed that a person studying at a specialized college for technology needs a minimum of practical experience and insight in order to enable him to relate theory to practice.

But despite this seemingly convincing argumentation there has also been criticism of the Fachoberschule, the main points being:

- There are not enough suitable openings for practical work experience, i.e. for pupils to acquire practical skill training;

- to the extent that such opportunities exist, it proves difficult to coordinate in-firm and school-based training;

- work experience does not impart knowledge and skills to the degree required for the application-oriented courses of the specialized colleges;

- pupils who fail the Fachoberschule course, or succeed but fail to secure a place in a specialized college, find themselves – despite a time expenditure of two years – without a qualification that would be of use to them on the labour market;

- because pupils from very different courses come together in the twelfth class, successful instruction at that stage is far more difficult.

In one Land (the Rhineland Palatinate) the entrance certificate for a specialized college can be acquired only in conjunction with completed vocational training. This solves two problems: the shortage of places for practical work experience and, consequently, insufficient vocational experience for college studies, and the young person who finds himself on the labour market without a qualification. But it does, of course, mean that it takes longer to acquire the entrance certificate for a specialized college; many young people see this as a disadvantage because for them the Fachoberschule is, first and foremost, an avenue to such a college and – by way of it – to the university. This is doubtless one reason why the other Länder cling to the concept of the practical work experience phase in the eleventh class. It must, however, be remembered that of the pupils in the technology and commercial categories of Fachoberschulen, a relatively large proportion – sometimes over one half – have, in any case, already completed vocational training; this is due to the fact that the vast majority of those leaving the Berufsaufbauschule, all of whom have completed vocational training, come from these two categories, i.e. technology and commerce. The bulk of the pupils in other types of Fachoberschulen (such as socio-pedagogics/social work) have come there from the Realschule, without any vocational qualification.

Thus the difficulties of the Fachoberschulen arise in part from the diverse prior qualifications and interests of the pupils.

Tab. 28 Pupils at Fachoberschulen and Fachgymnasien[15]

Year	Number of pupils (in thousands) Total	Females included in total
1969	20.7	3.3
1970	59.0	12.0
1972	105.7	26.7
1974	117.5	32.9
1976	121.8	38.3
1977	115.7	37.6
1978	113.0	37.9
1979	121.7	40.6
1980	136.5	40.6
1981	150.4	55.4
1982	158.8	57.4
1983	149.6	54.1
1984	140.0	51.3
1985	135.7	49.9

The number of pupils at Fachoberschulen rose steadily up to 1982; when evaluating this development, however, we must take into account the fact that the Fachoberschule did not come into being until 1968/69, so the increase in the number of pupils is mainly attributable to the establishment of more and more schools of this type (in 1979 there were 642 Fachoberschulen in all). Nevertheless, it can be said that despite all the problems that still beset it, the Fachoberschule, in a relatively short time, has become a firm and recognized integral part of vocational education, indeed of the education system as a whole.

4.3.3 Berufliche Gymnasien

Berufliche Gymnasien are a *continuation form* of the Gymnasium with a *vocational emphasis* which build upon the intermediate school certificate (the Realschule leaving certificate) or a recognized equivalent and lead to the general or faculty-restricted university entrance certificate. Although they are not found in all the Federal Länder, there is a relatively high number of these schools (361). The name itself indicates that this is a very heterogeneous type of school and a recent survey[16] lists no fewer than sixty-six different designations! In the commercial category we find the **Wirtschaftsgymnasium, Wirtschaftswissenschaftliches Gymnasium, Fachgymnasium Wirtschaftswissenschaften, Fachgymnasium Wirtschaftswissenschaftlicher Typ, Fachgymnasium Wirtschaftlicher Zweig** and so on. Similarly, the technological category includes **Technisches Gymnasium, Technisches Gymnasium – Schwerpunkt Elektrotechnik, Gymnasium Bautechnik/Baugestaltung, Technisch-Wisenschaftliches Gymnasium,**

15 From: Basic and Structural Data 1986/87, pp. 27 and 33. (There are no separate statistics only for pupils at Fachoberschulen.)

139

Berufliches Gymnasium Technik, etc. Other categories are Home Economics/Nutrition, Agriculture, and Social Studies. Most designations include the terms '**Berufliches Gymnasium**' and '**Fachgymnasium**'.

In addition, there are the various categories of **Berufsoberschulen**, which can be attended only after completion of vocational training.

But all these schools have one thing in common, namely that they prepare pupils for either the *general* or the *faculty-restricted* university entrance certificate and impart, to a greater or lesser degree, vocational education. The separate existence of this type of Gymnasium, which is usually not independent but organizationally part of a Berufsschule and/or a Berufsfachschule, can be viewed and understood only against the specific background of the German educational tradition. The general-education schools, especially the Gymnasien, have always refused to teach technical, economic and social subjects, and this is still true today. This is based on a conception of education that goes back to Wilhelm von Humboldt, and which cannot be gone into in detail here. But it can be said that the advocates of Berufliche Gymnasien regard themselves as the champions of a modern concept of education that leaves traditional general education far behind.

Tab. 29 Young people leaving Berufliche Gymnasien with general or faculty-restricted university entrance certificates

Year	Berufliche Gymnasien		Gymnasien/Gesamtschulen	
	Total	Females	Total	Females
1972	1 952	777	91 229	38 616
1974	6 120	2 272	109 967	49 472
1976	10 514	4 229	126 382	59 733
1978	11 759	4 901	150 979	71 415
1980	11 885	4 712	149 173	71 173
1981	13 563	5 486	175 279	86 399
1982	16 105	6 675	190 080	94 236
1983	18 240	7 845	200 539	99 649
1984	18 826	7 989	204 127	102 718

4.4 The vocational educational path

In an initial approach to describing the vocational educational path it can be said that vocational knowledge, capability and experience are material components and that it enables young people to acquire the university entrance certificate, the prerequisite for higher education. In that respect this avenue, also known as the 'second' educational path, represents an alternative to the

16 Handbuch der Lehranstalten für das Bundesgebiet mit Berlin (West) einschliesslich deutscher Schulen im Ausland, VII Ausgabe, pub. by Wirtschafts-Verlag M. Kling GmbH, Munich 1980, pp. 519-527.

Gymnasium educational path, which is sometimes referred to as the 'first educational path'. Thus it becomes clear that, strictly speaking, one cannot speak of the vocational educational path when a specific kind of vocational qualification is intended, which is imparted through a certain vocational training institution, be it the dual system or a Fachschule.

When, for example, someone has attended a Fachschule of the technological type and become a state-certified technician, one does not say of him that he pursued the vocational educational path; he has acquired a vocational qualification. In other words, the importance, the purpose and the problems *of this path derive solely from the target component of the university entrance certificate*. But if one takes the holder of a diploma in engineering gained by going on from the Hauptschule to vocational training within the dual system, then proceeding via the Berufsaufbauschule to the Fachoberschule and thence to a specialized college and, finally, the technical university, one can quite rightly say that he has followed a *vocational educational path*.

This example (see also Fig. 24) shows that, institutionally, the vocational educational path is a *graduated succession of educational establishments* which, in one form or another, have a vocational content or, indeed, confer a vocational qualification (like training in the dual system) but which are, in principle, independent of each other. This path becomes a continuum only when the person proceeding along it so decides. And the fact that the 'ascent' is made via a series of 'platforms' is regarded as a particular virtue of the vocational educational path. If a person – such as a qualified skilled worker holding the Fachschule entrance certificate (gained at the Berufsaufbauschule) – for whatever reason does not wish to, or cannot, proceed from a particular platform to go on and acquire the university entrance certificate, this does not mean that he then 'falls by the wayside'.

The *idea* of the vocational educational path can be traced back to the Weimar Republic. In 1930 Otto Hessler, then the leading trade union expert on education, wrote 'For most of the working population there is no way to better themselves other than through their work. This path leads through the stages of: Volksschule, apprenticeship, a selected course and the Fachschule. To a certain extent it also means that education does not have to be dependent upon assets, since training can proceed alongside the day-to-day work, or alternate with it.'[17]

Here the vocational educational path is described as the only one by which the working person could attain a *higher level of education*. This idea, albeit in a somewhat modified form, was also at work when, after World War II, the vocational educational path became one of the central questions of vocational education and training. In this connection it would be as well to remember that until the end of the 1950s only a relatively small proportion of the population in the Federal Republic of Germany acquired the university entrance certificate – in fact fewer than 5% of those born in any particular year, and the number of working-class young people entering university was correspondingly small.

So at that time young working-class people were still very much under-represented in the 'first' (Gymnasium) educational path. But this deficiency was not then given such importance that it could have become the decisive motive for the development of the vocational educational path. In its conception and institutionalization didactic and educational theory aspects – in particular

17 Hessler, O.: Gewerkschaften und Berufsschule, Berlin 1930, p. 32.

the Berufsaufbauschule as its pivotal institution – played a far greater role. The multi-facetted and sometimes contradicting discussions about the vocational educational path and its didactic and educational prerequisites cannot be recounted here. It can only be said that neither its theoretical (educational) foundation nor its practical realization has so far proved a convincing success. In particular, because *Gymnasium education* is still such an effective *yardstick*, the vocational educational path's essential component, namely 'education via the occupation' could be only partially realized.

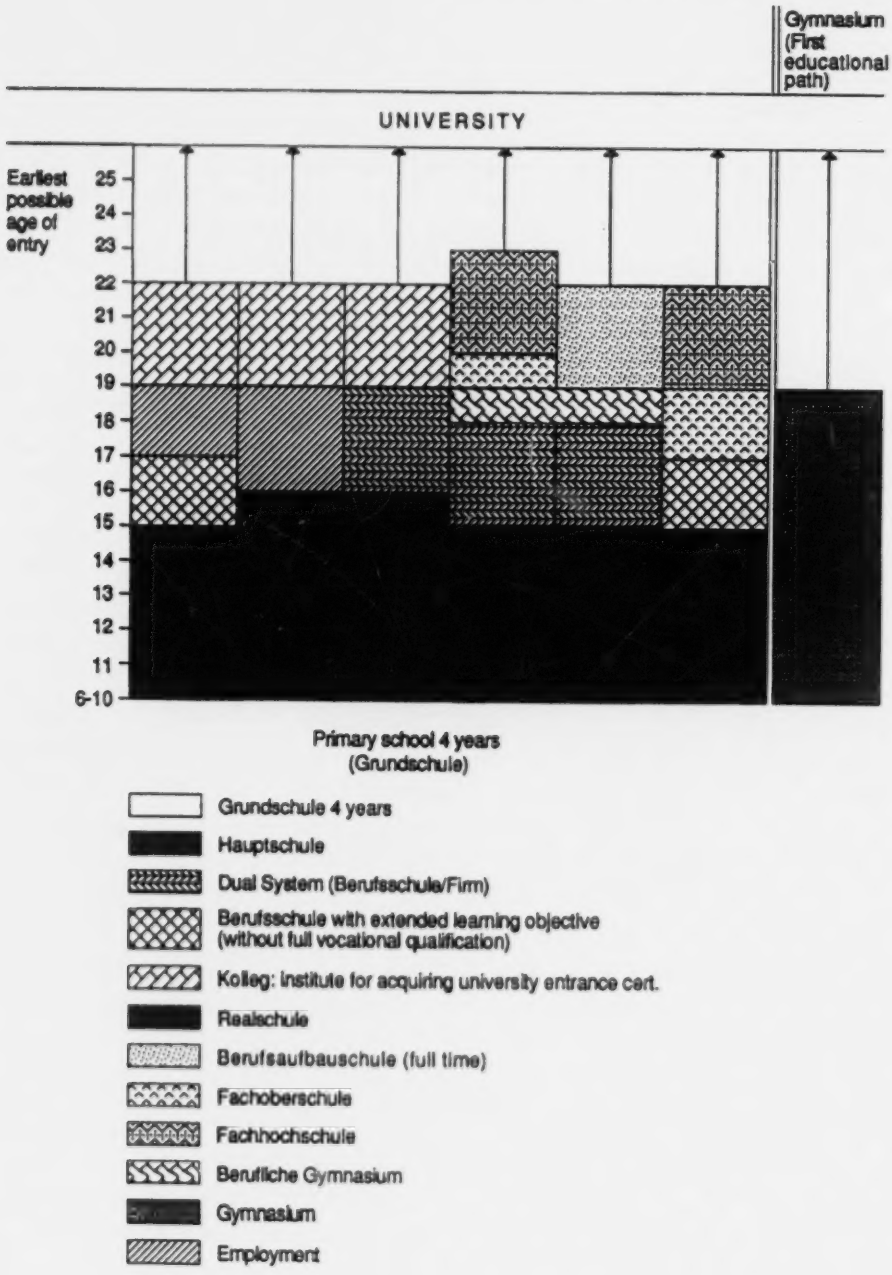
The fact that this path now occupies a fringe position in vocational policy and pedagogy is due, above all, to the fact that far wider sections of the population have had access to the Gymnasien since the mid-1960s. An indication of the quantitative decline in the importance of the vocational educational path is the decrease in the number of pupils attending Berufsaufbauschulen.[18]

On the other hand, the manifestly shrinking market for exclusively academic qualifications could encourage the trend towards what are now called dual-qualification courses of education[19] (e.g. conferring the university entrance certificate in conjunction with a marketable vocational qualification), which would give the second educational path a fresh impetus, albeit with different points of emphasis.

18 Cf. p. 129.

19 Cf. p. 165 et seq.

Fig. 24 Some variants of the vocational educational path (Second educational path)



5. PROBLEM GROUPS OF VOCATIONAL TRAINING

5.1 Vocational training of young handicapped persons

5.1.1 Definitions

The vocational training of the handicapped is a task of the first importance, not only in training policy but also in social policy; but in an industrial society which is strongly performance-oriented it is constantly in danger of being pushed into the background. Nevertheless, over the last two decades, educational and labour policies in the Federal Republic of Germany have resulted in considerable efforts being made to help disabled young persons, too, to gain a vocational qualification and thereby give them an essential prerequisite for a happy life and social opportunity. From the economic aspect, too, the vocational qualification and integration of the handicapped young has acquired increasing importance. It can, indeed, also contribute towards meeting the shortage of skilled workers which demographic developments seem likely to bring about.

The training of the handicapped demands a *differentiated system* of training measures if the very diverse types and degrees of disability are to be catered for. But, as has been confirmed in the literature and in practice, it is not easy to establish demarcation criteria for the various groups of handicapped persons so that they may be specifically promoted and trained. Furthermore, handicaps in the cognitive and psychomotor field, and in the field of behaviour, are not only objectively ascertainable facts but also the result of assessments made against the background of a socio-cultural system of norms and values, of basic positions of educational and social policy.

A very broad interpretation of the term 'handicapped' can, for example, lead to a situation where young people are needlessly channelled into special training measures. Conversely, with a too-narrow interpretation there is the inherent danger that some young people will not receive adequate individual promotion, which can result in dropping out or failure in examinations.

In the Federal Republic in recent years the basic trend has been to avoid, *as far as possible*, special – and that means separate – training courses for the handicapped, although the unions are somewhat more emphatic in their support of this attitude than the employers. In its statement of February 1977 on 'The vocational training of young persons with learning difficulties and the vocational training of the mentally and/or physically handicapped' the German Trade Union Federation has clearly set out that young people with *learning difficulties* are not handicapped persons and that they must therefore be prepared for their occupation within the existing vocational training system, with due attention being paid to their particular learning behaviour and the additional promotion this demands. The assumption, borne out by experience in pilot projects, is that young people with *learning difficulties* are quite capable of gaining a full vocational qualification, for example within the dual system. But special *methodical* arrangements (like learning on projects) and additional *socio-pedagogic care* are needed to offset the individual learning difficulty and, in particular, to remedy deficits in the behavioural area where necessary. There is widespread agreement that for this group of young people, some of them lacking a Hauptschule leaving certificate, others coming from special schools, there is no need to make special *institu-*

tional provisions for vocational training; all that is required is additional, carefully-directed training methods and socio-pedagogic care in the usual learning venues within the dual system. For the young *handicapped* in the narrower sense of the term, however, there are a number of institutional *special measures* catering for various degrees of disability, which will now be described.

5.1.2 The vocational training of handicapped persons in accordance with Articles 44, 48 of the Vocational Training Act and Articles 41, 42b of the Crafts Code

Articles 48 of the VTA and 42b of the Crafts Code make provision for special training measures for young people who are physically, mentally or psychically handicapped. Those with a significant and lasting reduction of intellectual capacity are also included in this group which, it is assumed, is not capable of completing vocational training for a recognized skilled occupation. Pursuant to Article 44 of the VTA and Article 41 of the Crafts Code, the competent bodies (usually the Chambers) are responsible for regulating *special training courses* for the young handicapped. In 1986 there were about 477 training regulations issued by these bodies, covering 114 recognized skilled occupations; of these, about half came from the Chambers of Industry and Commerce and the remainder from the Crafts Chambers and the other competent bodies. Training lasts between twelve months and three years, depending upon the skilled occupation.[1]

In order to improve, in particular, the quality of vocational training and occupational mobility, efforts are being made to bring about uniform regulations for training under Article 48 of the VTA and Article 42b of the Crafts Code throughout the Federal Republic. The basis is provided by the recommendation of the Central Committee of the Federal Institute for Vocational Training, 'Training regulations for handicapped young persons in accordance with Articles 44, 48 of the Vocational Training Act and Article 41 of the Crafts Code' dated 12 September 1978. The uniform nationwide courses for the handicapped young are intended to enable them, above all, to practise an independent occupation which is not tied to a particular firm. The level of requirements in the courses should lie, more clearly than hitherto, above unskilled and semi-skilled activities and permit the trainee, ultimately, to qualify in a recognized skilled occupation.

The training courses for young handicapped people are run in firms suited to the purpose, but training is also given in what are known as **Berufsbildungswerke**, which are described below.

5.1.3 Vocational training in Berufsbildungswerke

Berufsbildungswerke are training centres devoted to, or mainly concerned with, the vocational training of the handicapped young. They are run by *charitable organizations* such as the Kolpingwerk, the Christliches Jugenddorfwerk Deutschlands and various foundations, etc. The centres are often coupled with *boarding schools*, where the young disabled can be accommodated and given intensive socio-pedagogic care. Because of the manifold problems

1 Index of recognized skilled occupations. Pub: Federal Institute for Vocational Training. 1986 edition, p. 162 et seq.

which training these young people present, the school-based part of their training is normally given in a *special Berufsschule* associated with the training centre.

The centres provide training for young people who are physically, mentally or psychically handicapped and, because of the nature and extent of their handicap, cannot undergo in-firm training, and require special social and psychological care if they are to attain their training objective. They are admitted to a centre via the competent employment office, usually on the basis of an attitude expertise submitted by the psychologist attached to that office and a report by the employment office doctor. Training measures in the centres are aimed not only at special training in accordance with Art. 48, VTA/Art. 42b, Crafts Code but also, if to a lesser extent, at training in recognized skilled occupations. However, those young people who are trained for skilled occupations at the centres are, for the most part, handicapped only in the widest sense and should probably be classified as merely having learning difficulties. For reasons already mentioned, this is the subject of criticism on the part of the trade unions.

Since 1970, thirty-five Berufsbildungswerke, providing over 10 000 training places have been established in the Federal Republic of Germany.

5.1.4 Vocational training in workshops for the disabled

Workshops for the disabled prepare *severely handicapped* young people for simple jobs in the labour market or provide work opportunities for those whom it is impossible to place. The range of measures and facilities offered by these workshops embrace initial training places, production workshops, permanent employment and opportunities for therapeutic employment. At present there are about three hundred of these workshops in the Federal Republic and in 1984 10 200 young persons joined these workshops.[2]

Entrants must normally be over the age of eighteen, but in special cases young people aged sixteen to seventeen leaving the special forms of the Basic Vocational Year[3] can also be considered. As compulsory full-time education can be extended to the age of eighteen these young people usually attend *special schools* until they reach that age.

An application for admission to a workshop may be submitted by the parents, the social welfare office or the employment office and prior to admission the young person is given psychological tests and a decision on his suitability is arrived at by an admissions team consisting of one representative each from the employment office, the social welfare office and the workshop.

Essential prerequisites for admission are:

- the young people must be able to live as members of a community,
- they must be capable of achieving a minimal economic performance,

---

2 The Federal Minister for Education and Science: Vocational Training Report 1980, p. 77 et seq. Cf. p. 168 et. seq.

3 Ibid. Vocational Training Report 1986, p. 102.

– they must be, to a large extent, independent, i.e. needing only minimal care.

If, after submitting the applicant to psychological tests and/or securing an official medical opinion, the employment office comes to the conclusion that the young person can achieve at least one third of the performance of an unhandicapped person, he can participate in the *integration courses*[4] which are run in the workshops for the disabled and financed by the Federal Institute of Labour.

5.2 The vocational training of girls

5.2.1 Vocational disadvantages suffered by girls

In the Federal Republic of Germany women and girls are still at a disadvantage in working life. This is only partially due to the fact that the proportion of girls with *no vocational training*, or only a minimal vocational qualification, is far higher than it is among boys. This is also true of the qualification level of the dual system of training, in which girls are very much under-represented (1985: 40.6%). It is also noteworthy because in recent years girls have, numerically, almost drawn level with boys in the secondary schools.

But despite good leaving certificates, the girls' chances of finding a young place are distinctly less than the boys'. Of those searching in vain for a training place in 1980, 60.8% were girls. This is also attributable to the fact that young women are offered fewer training places than young men. Only 25% of all training places are offered to both men *and* women, while 25% are offered exclusively to women and 50% to men only. The fact that women are *more at risk* than men is due not only to the high number of untrained women but also to the *low level of qualification* attained by so many who have undergone training. Furthermore, many women still regard paid employment as a transitional, makeshift solution and they are therefore more prepared to undertake low-qualified work and, during labour market crises, to let themselves be pushed back into their 'proper sphere', namely the family and housekeeping. Since lack of, or minimal, vocational training greatly reduces motivation to undergo further training – as all the relevant studies show – it is only rarely that the qualification deficit is remedied by taking advantage of further training opportunities.

When boys do not undergo vocational training, this is usually due to their bad performance at school, to deficits in their learning and training capacity. With girls, on the other hand, the *reasons for not undergoing training* are quite different:

– less motivation for vocational training due to the traditional understanding of roles and, in consequence, the value attached to training and employment in relation to other aspects of life;

– the fact that the daughter's help is regarded as necessary in some households, and this applies particularly to working-class homes;

4 Cf. p. 179.

- the narrow range of skilled occupations for girls ("women's jobs") and, consequently, the limited number of training places on offer;

- the fact that a general shortage of training places affects girls in particular, since competition with boys is then keener and they usually lose out (the relative decrease in the number of training places during the last ten years has hit girls far harder than boys);

- the fact that, with the prevailing shortage of training places, girls are also being driven out of some qualified occupations where their chances were formerly good, while no new training opportunities in other occupations are being opened up to them;

- the influence of employment policy changes in relation to labour market and employment conditions affects the popularity of certain skilled occupations in such a way that they also become attractive enough for boys.[5]

5.2.2 Improving training opportunities for girls

Recognizing the reasons why women and girls are at a disadvantage in vocational training and working life, the Federal Government and the Länder have, for some time, carried out various measures to remedy this situation. In the foreground are the pilot project programmes of the central government and some of the Länder to open up industrial-technical skilled occupations to women. These projects will help to establish to what extent, and under what conditions, young women and girls can successfully complete vocational training in those industrial-technical occupations hitherto regarded as typical men's jobs. Moreover, the example of such pilot projects was intended to motivate girls to undergo training in these occupations, which were traditionally closed to their sex.

The general aim of these measures is to open up a *wider range of occupational choices* and, as a prerequisite, to extend the range of training places available to them.

Between 1977 and 1981 the total number of female trainees rose by 27% (from 510 000 to 652 000), while the total number of trainees increased by only 22% during that time. Over the same period the number of young women in industrial-technical occupations included in the pilot programme rose from 3 037 to 13 059.

But the problem can be properly solved only if outdated role stereotypes are set aside, and here the schools have a major part to play. There are, for example, recommendations and initiatives the aim of which is that the introduction to working life (**Arbeitslehre**) given at the Hauptschule, which is directed towards occupational orientation, shall no longer take one form for boys and another for girls.

---

5 Ministry of Labour, Health and Social Affairs of Land North Rhine-Westphalia (pub.): Jugendliche ohne Ausbildungsvertrag (Young people without training contracts), Report of the scientific commission Arbeit und Beruf 24, Düsseldorf 1979, p. 120 et seq.

118

5.3 The vocational training of young foreigners

5.3.1 Causes and extent of the problem

One of the biggest and most difficult problems of vocational training policy today and, indeed, in the future, is the training of migrant workers' children. It is both quantitative, in view of the very large numbers of young foreigners, and qualitative, having regard to the considerable educational and training deficits which still obtain among this group.

Over recent years the number of young foreigners has risen steadily, although the number of males over the age of sixteen fell by 20.9% between 1974 and 1978.

Tab. 30 Young foreigners under sixteen years of age 1982–1985[6]

Year	Foreigners	Young foreigners under 16 years of age	
	Total (in millions)	Total (in millions)	As % of total number of foreigners
1982	4 671.8	1 325.8	28.4
1983	4 574.2	1 261.9	27.6
1984	4 405.5	1 162.9	26.4
1985	4 481.6	1 145.0	25.5

Nearly half of the young foreigners who were under sixteen in 1979 – about half a million – were born in the Federal Republic. The Federal Government estimates that, at present, between forty and fifty thousand of these young people reach working age each year. At the beginning of 1980 the number of foreigners between fifteen and eighteen years of age was around 191 000 and it is rising steadily. It is expected that this figure will nearly double by 1990. 'One half, at most, of the young people in the age groups mentioned attended a vocational school in the school year 1977/78. Only about 50% of those required by law to attend the Berufsschule actually did so and only one in four, at most, is undergoing regulated vocational training.'[7]

Those young foreigners who come to the Federal Republic when they are already of school age find it particularly difficult to embark on, and successfully complete, vocational training. For them the substantial *language and educational deficits* present a formidable, often insurmountable, barrier.

For the *girls* the religious and socio-cultural norms and values of their homelands represent an additional obstacle to taking advantage of educational and training opportunities, and this is particularly true of the Turkish and Greek girls. But about one half of all young people from the

6 Calculated on the basis of the Basic and Structural Data 1986/87, p. 261.

7 From: Memorandum of the Federal Government Commissioner for the integration of foreigners, former Land prime minister Dr. Heinz Kühn, Bonn, September 1979.

European source countries are Turks, and the Greeks are also a large group. In contrast to this, the educational and vocational integration of young Italians is, for various reasons, relatively less problematical. The differing 'cultural distance' between the various nationalities and the 'host country' is thus one reason why the educational and training deficits are so heterogeneous, but this also means that measures for the educational and vocational integration of these young people must take into account their widely differing socio-cultural backgrounds.

So, as far as a vocational training policy for young foreigners is concerned, the following are the main features of the initial situation:

- Young foreigners form a very large group among the young people in the Federal Republic, and one that continues to grow.
- The young foreigners are a very heterogeneous group, with a varying socio-cultural gap between them and the host country and varying deficits in education and training.
- The great majority of young foreigners are still underprivileged in the education and training system of the Federal Republic of Germany.
- The majority of young foreigners, for various reasons, do not take advantage of the educational and training opportunities which, after all, exist for them too – or they are not aware of what is being offered.
- The vast majority of young foreign workers between the ages of fourteen and twenty-five (about three-quarters) are in unskilled or semi-skilled jobs.

5.3.2 Objectives and measures

The *objectives* of vocational training policy for young foreigners emerges, in essence, from the outline objectives of the *policy for migrant workers*. As a result of the preparatory work done by the 'Federal Government – Länder Commission for the further development of a comprehensive conception of a migrants employment policy', migrant policy generally has taken a distinct turn towards '*consolidation*' and '*integration*'. According to the decisions taken by the Federal Cabinet on 19 March 1980[8] 'consolidation of the employment of migrants' means, above all, avoidance of further growth in the employment of foreigners, and 'integration' means the social and vocational integration of those who can, and wish to be, integrated.

The main target group for these increasing efforts to achieve integration are the second and third generations of migrants; from kindergarten to school and vocational training, and on to further training, they are to have the same educational and training opportunities as their German contemporaries.

---

8 Cf. 'Weiterentwicklung der Ausländerpolitik' (Further development of migrant worker policy), decisions of the Federal Government dated 19 March 1980, available as a duplicated manuscript.

This is not only a matter of avoiding or minimizing the potentially explosive situation which can arise if there is no adequate social and vocational integration of the rising generation of migrants, but also a step towards reducing the shortage of skilled workers which is likely to worsen in the mid-1980s.

These efforts are made more effective by the fact that young migrants are definitely interested in education and training.

Responsibility for improving educational opportunities for young migrants, whether in the kindergarten or at school, rests with the communes and the Federal Länder, as laid down in the constitution, therefore there is no uniformity of measures and procedures in this area of education.

The Federal Government and the Länder jointly promote *vocational preparation measures*[9] for young foreigners who do not have the German Hauptschule leaving certificate or adequate knowledge of the German language. These are funded by the Federal Institute of Labour (75%). the Federal Government and the Länder (12.5% each) and are known as 'Measures for the vocational preparation and social integration of young foreigners'. There were about 3 021 participants in the 1985/86 courses.

The Federal Government and the employers' and workers' organizations regard the vocational training of more young migrants in the future as an important objective. It is also generally agreed that no special courses – which always means separate courses – should be introduced for foreigners. Thus the dual system is to play an important part in the training of these young people too.

It is therefore regarded as important that the various sectors of the economy should be encouraged to train increasing numbers of young migrants, not only by appealing to employers but also through financial promotion and inducement programmes (e.g. those of the Länder).

Pilot projects for the vocational training of young migrants initiated and financially promoted by the Federal Government are intended, in particular, to indicate how, with the aid of special methods and measures (e.g. socio-pedagogic care) those with educational deficits (like lacking a Hauptschule leaving certificate) can be successfully trained in recognized skilled occupations. The results of these projects will provide both firms and Berufsschulen with essential information for giving these young people appropriate and successful vocational training.

The fact that, even now, relatively few young migrants seek training for a skilled occupation is partly due to the fact that they and their parents lack the necessary information about the education and training system, and are also unaware of the importance of vocational training for the individual worker in the Federal Republic of Germany. Special *educational and training counselling* for young foreigners and their parents is therefore of particular importance. This is the

9 Cf. p. 179

task of the Federal Institute of Labour, which is developing its counselling service with this group in mind, and it is in this context that 'active contacting counselling' has been suggested.[10]

This means a counselling procedure that 'goes to' those who are particularly in need of guidance, and these include the young foreigners and their parents. Experience has shown that a counselling service which is merely 'offered' is seldom, if ever, taken advantage of by those who need it most.

The aims and tasks involved in the vocational qualification of young migrants are recognized and there is virtually no disagreement between Federal Government and Länder, employers and workers. Even so, one cannot be entirely optimistic about the prospects for a complete solution to this problem. Both qualitatively and quantitatively, its dimensions are so great that at present, as in the past, one can make headway only very gradually.

5.4 Young people without training contracts

5.4.1 Size of the problem group and reasons for lack of training

Today, vocational training for as many young people as possible is a generally recognized aim of educational and social policy in the Federal Republic of Germany. Accordingly, during recent years the attention of those concerned with vocational training and pedagogics has also focused on those young people who do not undergo properly regulated training. These are young persons who, lacking a vocational qualification, enter working life as unskilled workers or, again due to lack of qualification, cannot find a job at all(unemployed) or, having completed compulsory education, seek neither training nor work (the unregistered jobless).

Experience has shown that when jobs are scarce people with little or no training are a high risk group, in danger of becoming, or remaining, unemployed and, in the end becoming the 'pariahs' of society. It is generally accepted that a vocational qualification is not only the most important material basis of existence but also the decisive prerequisite for development of the personality, for a feeling of one's own worth and for social recognition.

And while, happily, it can be confirmed that the number of young people without training contracts, and therefore lacking a vocational qualification, has fallen steadily in recent years, their number is still too great to allow us to neglect this particular problem. Moreover, there are many indications that their numbers can be further reduced only if vigorous efforts are made .

10 Cf. Ministry of Labour, Health and Social Affairs of Land North Rhine-Westphalia (Pub.): Jugendliche ohne Ausbildungsvertrag (Young people without training contracts). Report of the scientific commission Arbeit und Beruf 24, Dusseldorf 1979, p. 102 et seq.

Tab. 31 Trainees and young people without training contracts in the Federal Republic 1962 – 1978 (in thousands) – Berufsschule statistics

Year	15-17 years (incl.) (a)	incl. trainees (b)	Young people without training contracts					
			Unskilled (b)	Salaried empls. (b)	Assisting family members (b)	Unempld. & unregd. jobless (b)	Total	in % of all 15 - 17 yr. olds
1962	1947	1315.3	199.1	13.0	65.1	21.6	298.8	15,3
1963	2144	1377.0	212.6	15.4	71.6	22.33	321.9	15.0
1964	2282	1417.6	217.7	17.1	68.7	20.8	324.3	14.2
1965	2368	1450.2	229.0	18.8	63.9	18.2	329.9	13.9
1966	2385	1438.1	215.5	19.6	54.1	20.1	309.3	13.0
1967	2364	1489.1	202.5	18.3	42.0	28.4	291.2	12.3
1968	2353	1484.8	197.0	15.9	32.4	24.6	269.9	11.5
1969	2391	1387.4	186.1	17.1	20.9	20.3	244.4	10.2
1970	2412	1362.4	183.0	20.5	14.7	19.2	237.4	9.8
1971	2489	1346.1	171.4	21.4	9.8	22.9	225.5	9.1
1972	2564	1380.2	174.2	20.3	9.7	26.6	230.8	9.0
1973	2660	1399.3	173.8	19.6	8.1	29.4	230.9	8.7
1974	2744	1381.7	165.5	18.5	8.6	54.2	246.8	9.0
1975	2817	1366.6	151.0	9.0	8.6	72.1	240.7	8.5
1976	2915	1352.7	142.7	13.1	8.0	68.8	232.6	8.0
1977	2983	1435.2	130.5	7.3	6.6	63.4	207.7	7.0
1978	3043	1517.3	115.0	8.4	5.5	60.5	189.4	6.2

Sources: a) Fed. Stat. Office: to 1974 Bevölkerung und Kultur, Fachserie A, from 1975 Bevölkerung nach Alter und Familienstand, Fachserie 1, Reihe 13
b) Fed. Stat. Office: Bildung und Kultur, to 1973 Fachserie A, from 1974, Fachserie 11.

In 1985 there were 1 909 228 young people attending Berufsschule on a part time basis in the Federal Republic. Of these, 1 820 673 had a training contract; 37 420 had no training contract and 51 135 wre unemployed.[11]

The table shows that two groups of young people who are also included among those without training contracts, have grown much smaller numerically and are virtually without significance. These are *young salaried employees* who, without any formal training, enter salaried employment on leaving school (e.g. in a bank) and young *family members assisting in family undertakings*, mostly in agriculture and the crafts. The largest group among the young persons without training contracts has always been the *unskilled workers*, which is to some extent the reason why the problem of the young unskilled is seen as the problem of the young untrained, the

11 Federal Statistical Office, Fachserie 11, Bildung und Kultur, Reihe 2, Berufliches Schulwesen 1985.
It should be noted that since 1979, the Federal Statistical Office only differentiates between "gainfully employed with a training contract" (trainee), "gainfully employed without a training contract" and "unemployed" (formerly: unemployed persons and unregistered jobless).

young people without training contracts. While there has been a marked decrease in the number of young unskilled workers in the last two decades, the *unemployed and unregistered jobless* group has grown considerably - with only a slight decrease since 1976. This distinct increase, which was particularly rapid between 1973 and 1974, and between 1974 and 1975, is an indication that in times of economic recession and fewer jobs, those worst hit by unemployment are young people without vocational training.

Whereas girls make up only a good third of all trainees, among the young unskilled, the unregistered jobless and the unemployed there are *more* girls than boys. The reasons why so many girls lack training have already been dealt with.[12]

Although young persons without training contracts are in no way a homogeneous group, the following characteristics are fairly general:

- they come mainly from working-class families and in most cases the father is an unskilled or semi-skilled worker;
- most of them have educational deficits; the majority have no Hauptschule leaving certificate and many come from special schools;
- the majority have a comparatively weak learning and performance capacity; furthermore, their social behaviour is distinctly retarded or disturbed;
- the traditional concept of the woman's role (housewife, marriage as the aim and task in life) – although modified and diminished of late – has an additionally demotivating effect upon the girls in this group. Thus the importance attached to vocational training, occupation and employment is even less among the untrained girls than among the boys;
- young migrants have, on average, good cognitive faculties, but because of their cultural background, language, schooling and other factors they are at a disadvantage vis-à-vis their German contemporaries, so most of them, too, come into the category of young people without training contracts.

5.4.2 Initiatives for a solution

The reasons for lack of training among young persons are many and varied and are not to be found only in their educational deficits and/or relatively weaker learning and performance capacity. In addition to these (and other) reasons which lie in the sphere of the young person himself they are also apparent in the education system (like, for instance, the lack of specific promotion in the Hauptschule) and the employment system (e.g. the low number of training places which are also suitable for these young people).

Because of the complexity of the many reasons for lack of training among young people, the problem cannot be solved by a single approach but requires a whole package of measures.

---

12 Cf. p. 140 et seq.

A scientific commission[13] has developed structural elements for promoting and aiding young people without training contracts and some, at least, have been translated into action in various programmes and pilot projects launched by the Federal Government, the Länder, the labour authorities, firms and vocational schools.

Proceeding from the basic requirement that young people without training contracts need special promotion and assistance, the commission arrived at the following structural elements for a system to meet these needs:

- wide differentiation in the measures, according to both individual and group-specific variation in learning and motivation deficits, inclination and aptitude,
- extensive and carefully-directed socio-pedagogic aids to correct behavioural deficits and stabilize social behaviour,
- personnel-intensive care during counselling, prior promotion and vocational training; individual counselling, small learning groups which remain together, 'contact persons' to whom they can turn for advice.
- removal of financial barriers for the young person concerned and/or the parents,
- financial inducements and adequate allocation of funds for those implementing promotion and training measures catering for problem groups,
- where necessary, follow-up care during employment to stabilize vocational qualification and behaviour, both at work and in the social setting,
- problem-group-specific educational and vocational guidance; in other words, an intensive and continuous counselling service which actively follows up all young persons without training contracts,
- orientation of the vocational qualification contents of training measures to the specific needs and capabilities of the problem group: an approach which emphasizes 'practical' intelligence, theoretical instruction being restricted to that which is necessary for understanding the work process and self-assertion in the world of work,
- orientation of the method of instruction to the learning and behavioural difficulties of the problem group: learning in small groups, with intensive socio-pedagogic care; preference to be given to methods which
  - promote activity,
  - facilitate positive practical experience in a real work situation,
  - bring rapid and repeated experience of success and

13 Cf. Ministry of Labour, Health and Social Affairs of North Rhine-Westphalia (Pub.), loc. cit., p. 98 et seq.

- promote social behaviour (learning and working as part of a team),

- imparting qualifications that are usable and in demand in the employment system, but which can also be added to by taking advantage of further education and training opportunities,

- avoidance of discrimination and (negative) 'labelling' in all problem-group-related measures.

All those responsible in the Federal Republic of Germany are aware that further reduction of the number of young people without training contracts is a lengthy, indeed unending, task and that in carrying it out they must not take comfort from the fact that the proportion of young persons without vocational training in the Federal Republic is the lowest among all the EC countries.

6. ADULT VOCATIONAL TRAINING

6.1 Concept and forms of adult vocational training

Ensuring a future-oriented and innovative qualification potential which is both quantitatively and qualitatively adequate demands, in addition to vocational training of the young (which is usually initial training), adult vocational training which is both differentiated and dynamic. But one consequence of this is that such training is not a 'system' in the strict sense of the word and cannot be understood as such. The lack of transparency and systematics in this field – and this applies to the Federal Republic of Germany too – is due, in particular, to the multiplicity of aims, contents, target groups, institutions and legal bases which characterize adult vocational training. Furthermore, one cannot always draw a clear line between vocational and 'general' adult training and education, and there is also terminological confusion in the literature and in practice. Therefore the author must first of all attempt to demarcate and delineate adult vocational training terminologically and, with the aid of some important categories, give it a structure which will help the reader to gain an overall picture.

The description of adult vocational training that follows embraces all organized and thereby also *institutionalized learning processes*, which *follow on* from a vocational qualification gained either in a *formal course of training* (e.g. the dual system) or through *many years of practical experience* and which, whatever the form and purpose, are intended to impart *further vocational training*.

In conformity with linguistic practice in the fields of education, training and vocational pedagogics, which is uniform throughout the Federal Republic in these points, the term 'adult vocational training' excludes tertiary education.

It is not always clear whether an organized learning process, an educational or training measure, comes under the heading of vocational or general adult training. An industrial clerk taking a course in German at an adult education centre (**Volkshochschule**) can do so in the sense of general, but also of vocational, adult education. Didactic analysis of the course could probably elucidate this point.

Since '*organized and institutionalized learning processes*' are mentioned as one of the criteria for this description of adult vocational training, this means that those learning processes which are at times referred to in the literature as *situational* adult training are excluded, and will not be gone into in detail. These include, for example, initiation into a job or firm, familiarization with new tasks, transfer and advisory discussions, and so on.

'Adult vocational training' and 'further vocational training' are sometimes used as identical terms to cover all vocational education and training activities intended for adults. But, strictly speaking, not all these activities can be classified as '*further training*'. Accordingly, the term 'vocational *further training*' will be used to denote a *special kind* of adult vocational training. But this brings us up against another terminological difficulty. The Vocational Training Act, which deals primarily, but not exclusively, with initial vocational training within the dual system, refers to '**berufliche *Fortbildung***', which has generally been translated as 'advanced training'. But since

there are no sensible grounds for differentiating between 'advanced' and 'further' training, for reasons of systematics and consistency the term 'further training' only will be used here.

Bearing in mind these preliminary explanations and definitions, we can differentiate – according to type and objective – between the following *forms of adult vocational training*:

FURTHER VOCATIONAL TRAINING

- in accordance with the Vocational Training Act (Berufliche Fortbildung)[1] within firms and in external establishments
- outside the regulations of the VTA, within firms and in external establishments
- in accordance with the school laws of the Länder, in Fachschulen
- in accordance with the adult (further) education laws of the Länder, in adult education centres and other establishments

RETRAINING

- in special retraining centres
- within firms, at the request of the labour authorities

VOCATIONAL REHABILITATION

- in vocational promotion centres (Berufsförderungswerke)

VOCATIONAL REACTIVATION

- within firms
- in retraining or vocational promotion centres

6.2 Further vocational training

6.2.1 Further vocational training in accordance with the Vocational Training Act

In addition to regulating apprenticeship training, the VTA also contains regulations governing further training. Pursuant to Article 1, para. 3 of the Act, further training should 'enable a person to retain and extend his occupational knowledge and skills, to adapt them to technical developments or to make progress in his career'. In accordance with this objective it is now common practice in vocational training and vocational pedagogic circles to differentiate between updating training (**Anpassungsfortbildung**) and career development training (**Aufstiegsfortbildung**).

1 Cf. p. 151.

158

The purpose of updating training is to keep (or bring) vocational qualifications abreast of scientific, technical, production, service and organizational developments. Promotion processes within the hierarchy of occupations are not normally involved. An industrial clerk who takes an EDP course because he was taught nothing about this subject during training, but is now required to learn it, remains an industrial clerk. At any rate he is not immediately promoted because he has brought his qualification as an industrial clerk up to date. This is an example of *occupation-related* updating training. Then there is *job-related* updating training. For example, workers are prepared for technical and organizational changes in the workplace while there are no accompanying changes in the occupation description.

It is obvious that the firms themselves must, and indeed do, have the greatest interest in updating training; but it is also of considerable importance to the employees, for keeping their jobs and for making the most of their vocational opportunities. while the implementation of *job-related* updating training is exclusively a matter for the *firms*, *external institutions* are also involved in the provision of *occupation-related* updating training; these include, for example, the training establishments of the Chambers of Industry and Commerce, those of the crafts, the further training centres of the German Trade Union Federation and those of the German Salaried Employees' Union (**Deutsche Angestellten-Gewerkschaft**), and the training establishments run by industry and commerce.

Over a third of the further training measures in which employed persons participated between 1970 and 1976 were carried out at the workplace itself, or at any rate within the firm.

In 1978 the training establishments of industry and commerce ran a total of 2 300 courses, with about 48 000 participants attending for a total of 165 700 days, which means they have doubled their facilities since 1973.

According to the figures issued by the Association of German Chambers of Industry and Commerce (**Deutscher Industrie- und Handelstag**) approximately 138 000 persons took part in updating and career development courses arranged by the Chambers in 1982.

Since 1982 over 50 000 people have taken the Chambers' further training examinations, and of these about 34 000 were successful.

In 1978 the Crafts Chambers organized 6 963 further training courses, with 151 354 participants.

These are courses which prepare candidates for the master craftsman's examination and there are also technical, managerial and other courses.

Between 1965 and 1970 about 1.7 million people took part in further training measures. From 1970 to 1978 the annual average was about 165 000.[2]

Under Article 46 of the Vocational Training Act the competent bodies can conduct examinations 'to test knowledge, skills and experience gained during further vocational training' and in this

2 All statistics: The Federal Minister for Education and Science: Vocational Training Report 1980, p. 74 et seq.

connection the bodies have the right to set up examining boards and regulate the examinations. Furthermore, the Federal Minister for Education and Science (Art. 46, para. 2, VTA) is also required, in agreement with the Federal Minister for Economics – or whichever Minister is responsible – to publish statutory instruments concerning the holding of examinations in the field of further training. These regulations concern *career development training* only. Thus a certificate of success in the examination is proof of a *higher qualification* than that held at the commencement of the further training measure. The journeyman is now a master craftsman, the bank clerk has become a **Bankfachwirt**. The following tables provide information about the numbers and types of regulations.

Tab. 32 Federal regulations for further vocational training and retraining in accordance with the Vocational Training Act, the Crafts Code, the Seamen's Law and the Federal Officials Law[3]

Type of further training/retraining	Number of occupations covered									
	1 July 1977	1 July 1978	1 July 1979	1 July 1980	1 July 1981	1 July 1982	1 July 1983	1 July 1984	1 July 1985	1 July 1986
1	2	3	4	5	6	7	8	9	10	11
Master craftsman (Art. 45 Crafts Code)	36	37	43	46	47	50	51	57	59	61
Master craftsman (Art. 122 Crafts Code)	80	79	74	71	70	67	69	63	62	69
Master - (Art. 46, para 2 VTA)	–	2	4	5	5	5	11	11	17	18
Master – Agriculture (Art. 81 VTA)	6	6	7	9	9	9	10	10	10	10
Master – Home Economics (Art. 95 VTA)	–	1	1	1	1	1	1	1	1	1
Master (Art. 142 Seamen's Law)	–	1	1	1	1	1	1	1	1	1
Further vocational training (Art. 46, para. 2 VTA Art. 42, para. 2 C.Code)	2	4	6	6	7	7	10	11	12	12
Vocational retraining (Art. 47 VTA/Art. 42a C.Code)	–	1	1	1	1	1	1	2	2	2
Trainer (Art. 21 VTA)	3	3	4	4	4	4	4	4	4	4
Trainer (Art. 15 VTA)	1	1	1	1	1	1	1	1	1	1
Total	128	135	142	145	146	146	159	161	169	179

3 Index of recognized skilled occupations. Pub: Federal Institute for Vocational Training. 1986, p. 248 et seq. Both tables are extracts. It should be noted that in the original German, one refers to **"berufliche Weiterbildung"** and the other to **"Fortbildung"**. Cf. p. 224.

Tab. 33 Further training regulations of the competent bodies[4]

Total number of regulations:		1 003
These include, for the occupations		
– **Bankfachwirt** (banking)	50	
– Accountant (balance sheets, p/l accounts)	64	
– **Handelsfachwirt** (commerce)	60	
– **Industriefachwirt** (industrial office)	63	
– Foreman (industry, with specialization)	43	
– **Versicherungsfachwirt** (insurance)	35	
Number of occupations regulated (including 46 skill areas for foremen)		194

Most career development training measures are implemented by the training establishments of the Chambers of Industry and Commerce and the Crafts Chambers, but also in considerable numbers by the **Fachschulen**, especially the 'masters' schools', the further training centres of the Trade Union Federation and those of the German Salaried Employees' Union, also the training establishments of industry and commerce.

4 Index of recognized skilled occupations. Pub: Federal Institute for Vocational Training, 1986, p. 248 et seq. Both tables are extracts. It should be noted that in the original German, one refers to "berufliche Weiterbildung" and the other to "Fortbildung". Cf. p. 151 and p. 152.

Tab. 34 Further vocational training[5] 1978[6]

Branches and/or provider organization	Participants (approx.)	
Education/training schemes of industry and commerce	48 000	
Chambers of Industry and Commerce	120 000	
Crafts Chambers	151 400	
Occupational and branch associations; e.g. German Association for Welding Technology	81 500	
Schools for further vocational training (Fachschulen)	82 300	(School-leavers 1977)
Further training schemes of the Trade Union Fedn.	45 000	
Training schemes of the Salaried Employees' Union	57 900	

6.2.2 Further vocational training outside the regulations of the Vocational Training Act

Quite apart from, and at a lower level than, the further training carried out under the Vocational Training Act in accordance with the further vocational training regulations of the Federal Government and the competent bodies, which leads to recognized certificates, there are numerous further training schemes which do not culminate in the awarding of certificates. Most of these come under the heading of *updating training* and the majority are provided by *individual firms*. There are no exact data, but a study[7] carried out in Bavaria recently serves as a guide.

According to this, the further education/training facilities offered by the firms are, understandably, mainly of the vocational kind; but very often one cannot separate vocational from non-vocational further training, since some measures in the latter category also promote the worker's vocational qualification. On the basis of the Bavarian study it can be assumed that the vast majority of further vocational training schemes are implemented by the firms themselves, i.e. they are internal measures (in Bavaria 69.6%). Firms which employ only a few people, and therefore cannot run further training courses of their own, send their employees to external courses and

5 Updating training and career development training.

6 Cf. The Federal Minister for Education and Science (Pub.): Vocational Training Report 1980, p. 74 et seq.

7 Cf. Falk, R. and W. Bönisch: Betriebliche Weiterbildung in Bayern. Eine Dokumentation – Beiträge zur Gesellschafts- und Bildungspolitik, 67/81, Deutscher Instituts-Verlag.

institutions. These, including further training provided by the occupational associations, cover 18% of employees. About 12% participate in internal, non-vocational, education/training measures. Approximately 90% of the vocational, and about 60% of the non-vocational training takes place during working hours.

6.2.3 Further vocational training in accordance with the school laws of the Länder, in Fachschulen[8]

As already mentioned in the systematic description of the various forms of vocational school, completed vocational training or corresponding practical experience is a prerequisite for admission to a Fachschule. The courses lead to certified qualifications which are above the level of the qualification held at the time of admission. The skilled worker becomes a technician, the journeyman a master craftsman, the housemaid a qualified housekeeper, and so on. Thus the training offered by the Fachschulen, and their objectives, constitute *career development training*.

6.2.4 Further vocational training in accordance with the adult (further) education/ training laws of the Länder

In most Federal Länder during the 1970s, *adult education laws* or *further education laws* were passed which were intended, first and foremost, to promote the general and political education of adults. But the providers of these measures, together with other institutions – in particular the **Volkshochschulen** – also offer some courses in further vocational training. About 20% of the hours of instruction given in courses are devoted to such training,[9] both the updating and the career development kind. In some Länder there are *educational leave laws*[10] which also cover further vocational training, and thus give it an additional impetus. There are also numerous collectively agreed regulations (1983: 219). Many of these, however, do not correspond to the legal rulings of the Länder either with regard to their objectives or content. In 1982 approx. 3.7 million persons were entitled to educational leave under the laws of the Länder, 88 000 (2.38%) of whom took advantage of this entitlement. In 1976 43 000 persons took educatinal leave. Despite the fact that the number of participants has risen, the overall figure is still not very significant.

6.3 Vocational retraining

In a dynamic industrial society, and the Federal Republic of Germany is typical, it is no longer the norm that a person, once he has been trained in a particular occupation, shall continue to practise it all his life. *Change of occupation* is a widespread phenomenon.

---

8 Cf. Fachschulen, p. 183 et seq.

9 The Federal Minister for Education and Science: Education Report 1980, p. 75.

10 On this issue and that of educational leave in general, cf. Nuissl, Ekkehard and Sutter, Hannelore: Rechtliche und politische Aspekte des Bildungsurlaubs, Heidelberg 1984.

The *circumstances* which nowadays dictate a change of occupation, and that usually means retraining, i.e. acquiring a new vocational qualification, are manifold:

- A subjectively wrong choice of occupation, resulting in less than satisfactory vocational training and employment (lack of inclination and aptitude) results in the need to retrain.

- A considerable number of those undergoing retraining are employed in occupations which, for various reasons, are no longer in demand on the labour market.

- New occupations are appearing which have particularly good employment and development prospects. Retraining for such jobs means, above all, having the prerequisites for taking advantage of new social and occupational opportunities.

- Persons with no proper vocational training, or who have undergone training at a low level, are the first to be threatened with unemployment when jobs become scarce. For them retraining opens up new employment prospects.

Thus retraining fulfils important *functions* both for the individuals concerned and for the entire economy. For the individuals it means

- protection against unemployment,

- belated initial vocational training,

- correction of earlier occupational choices.

From the aspect of the economy as a whole, retraining can contribute towards correcting the prevailing imbalance on the labour market, where there is high unemployment at the base of the pyramid with, at the same time, shortages in certain skill areas.

Like further vocational training, retraining is regulated by the *Vocational Training Act*. Article 1, para. 4 states that: 'Vocational retraining shall enable the trainee to take up another occupation.' Article 47, para. 2 of the VTA lays down criteria for retraining measures. 'In content, type, objective and duration they must correspond to the particular demands of adult vocational training'. Article 47 also states that the competent bodies can conduct examinations to test knowledge, skills and experience gained in the course of vocational retraining. To this end they establish examining boards and regulate the examinations. The specifications of learning contents correspond in essence to those of initial vocational training within the dual system. In other words

they are governed by the Training Ordinances[11] (Art. 25, VTA), but for retraining the outline training plan and the examination requirements, in particular, have to be based, as far as possible, on the vocational experience and learning behaviour of the adults. The shorter duration of the retraining measures (vis-à-vis initial vocational training) alone necessitates changes. Having regard to the social circumstances of the trainee (e.g. a married man with children), training in a comparable occupation lasts only eighteen to twenty-four months, that is to say a year to a year and a half less than apprenticeship training.

The providers of retraining measures are

- individual firms where conditions for retraining are much the same as those for initial training but, in every case, is carried out at various learning venues,

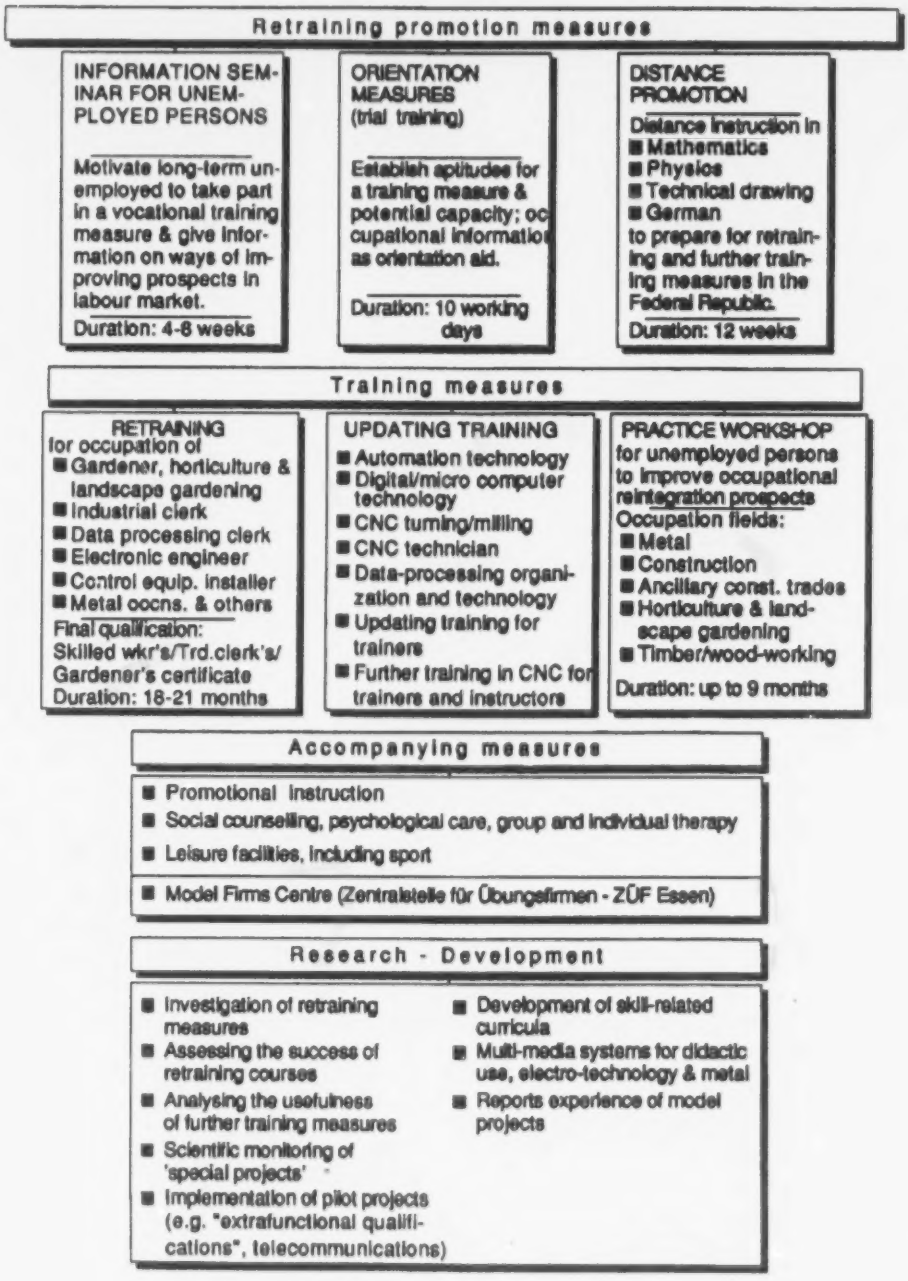
- group training centres or off-the-job training establishments such as schools, centres for the promotion and development of vocational training, or the training centres run by the Chambers of Industry and Commerce, the trade unions and the providers of social aid.

The Centre for the Promotion and Development of Vocational Training in Essen is a *model centre* for vocational retraining which not only carries out such training but makes the results, and the Centres experience, available to other retraining centres with the aim of improving and developing vocational retraining further. Measures are also developed and tried out which do not come within the sphere of retraining in the narrower sense of the term, but which prove to be necessary and beneficial at a time of high unemployment. There are, for example, *information seminars* for the unemployed which motivate the long-term jobless to participate in vocational training measures and inform them about opportunities to improve their prospects on the labour market.

It has recently become apparent that the 'normal' applicant for retraining, that is someone who has a full vocational qualification with experience of work and learning upon which the retraining course can build, is becoming increasingly rare. Therefore quite a number of trainees, especially those who have been unemployed for a long time, have to undergo *preliminary preparation* to bring them up to the required standard. The following diagram illustrates the manifold tasks of a centre for the promotion and development of vocational training and it will be seen that many other tasks are grouped around the main work of retraining, but these subsidiary activities are essential prerequisites for effective retraining. They are, in particular, *information seminars* for the unemployed, *orientation measures*, the basic stage of *preparation* for retraining in industrial/technical occupations and *preparation through distance learning*.

11 Cf. p. 84 et seq.

Fig. 25 Tasks of the **Berufsförderungszentrum Essen e.V.** (Centre for the Promotion and Development of Vocational Training, Essen)[12]


Retraining promotion measures
INFORMATION SEMINAR FOR UNEMPLOYED PERSONS
Motivate long-term unemployed to take part in a vocational training measure & give information on ways of improving prospects in labour market.
Duration: 4-8 weeks
ORIENTATION MEASURES (trial training)
Establish aptitudes for a training measure & potential capacity; occupational information as orientation aid.
Duration: 10 working days
DISTANCE PROMOTION
Distance instruction in
■ Mathematics
■ Physics
■ Technical drawing
■ German
to prepare for retraining and further training measures in the Federal Republic.
Duration: 12 weeks
Training measures
RETRAINING
for occupation of
■ Gardener, horticulture & landscape gardening
■ Industrial clerk
■ Data processing clerk
■ Electronic engineer
■ Control equip. installer
■ Metal occns. & others
Final qualification:
Skilled wkr's/Trd.clerk's/Gardener's certificate
Duration: 18-21 months
UPDATING TRAINING
■ Automation technology
■ Digital/micro computer technology
■ CNC turning/milling
■ CNC technician
■ Data-processing organization and technology
■ Updating training for trainers
■ Further training in CNC for trainers and instructors
PRACTICE WORKSHOP
for unemployed persons to improve occupational reintegration prospects
Occupation fields:
■ Metal
■ Construction
■ Ancillary const. trades
■ Horticulture & landscape gardening
■ Timber/wood-working
Duration: up to 9 months
Accompanying measures
■ Promotional instruction
■ Social counselling, psychological care, group and individual therapy
■ Leisure facilities, including sport
■ Model Firms Centre (Zentralstelle für Übungsfirmen - ZÜF Essen)
Research - Development
■ Investigation of retraining measures
■ Assessing the success of retraining courses
■ Analysing the usefulness of further training measures
■ Scientific monitoring of 'special projects'
■ Implementation of pilot projects (e.g. "extrafunctional qualifications", telecommunications)
■ Development of skill-related curricula
■ Multi-media systems for didactic use, electro-technology & metal
■ Reports experience of model projects

12 Situation: December 1986.

Between 1970 and 1978 an average of about 29 000 people per year underwent retraining. In 1984 there was a total of 43 100 admissions to retraining courses and of these 27 600 were men and 15 500 women.[13] In recent years there has been a marked increase in the number of entrants.

6.4 Vocational reactivation

These are training measures for imparting knowledge and skills, or updating them when they have become outdated, or been forgotten, due to long absence from the world of work. This form of adult vocational training, which is as yet little institutionalized, will become increasingly important. Here one thinks particularly of women – increasing numbers of whom have undergone vocational training – who temporarily give up work when they start a family but who then wish to resume work after the children have grown up, if possible in their old occupation. In a sense the *workshops for the unemployed*, where they can maintain their skills and thus improve their prospects of vocational reintegration[14], can also be regarded as a reactivation measure. And lastly, the border-line between so-called *initiation at the workplace* and *vocational reactivation* is fluid. Basically, vocational reactivation is a matter for the firms; if, due to long absence from working life, there are *extensive* qualification deficits, then they can be remedied in reactivation courses in *off-the-job* centres and schools. Reference has already been made to the fact that, as yet, institutionalization of these measures has not progressed very far, and this is also the reason why statistical material about the nature and extent of vocational reactivation is not yet available.

6.5 Vocational rehabilitation

By vocational rehabilitation we mean measures for the vocational reintegration of adults whose original vocational qualification or ability to work has been partially or wholly lost as a result of sickness or accident. Thus the target group for vocational rehabilitation are the *handicapped*. But vocational rehabilitation cannot be equated with vocational training of the handicapped, for which there are separate regulations and which, as a rule, means the training of young persons who have not previously undergone training or been in employment and whose disability is usually congenital.

The vocational rehabilitation of *adults*, which we are dealing with here, is carried out for the most part in *vocational promotion centres* (**Berufsförderungswerken**). Because of the peculiar initial situation and problems of those concerned, successful vocational rehabilitation requires a sizeable staff which includes experts not only in vocational and social pedagogics but also in psychology and medicine. So we find doctors and psychologists working alongside the teaching staff in these centres.

A particular feature of the centres is that they develop and use progressive teaching methods and apparatus, which can include computer-assisted instruction for instance. Together with the

13 Cf. Basic and Structural Data, 1985/86, p. 219.

14 Cf. Fig. 25.

special medical and psychological care this is an important prerequisite for successful and lasting rehabilitation. The centres do not confine themselves to imparting skilled worker qualifications but, in some cases (according to the individual capability and potential of the trainees), go far beyond this; at quite a number of them trainees can obtain a degree, as at an academic university or a specialized college with university status.

On the basis of a Federal Government action programme announced in 1970, a network of twenty-one vocational promotion centres with about 12 500 training places has so far been established. Two of them are specially equipped for paraplegics and three for blind persons. The providers of these centres are the social insurance institutions (e.g. accident insurance), with the Federal Institute of Labour occupying a central role, but the Federal Ministry of Labour and Social Affairs and the Länder are also involved in individual projects.

The number of rehabilitation measures (retraining measures for handicapped adults) approved by those who bear the costs has remained constant for some years at over twenty thousand per annum.

6.6 The role of the Employment Promotion Act (Arbeitsförderungsgesetz) in adult vocational training

Where adult vocational training is given in publicly-run schools such as the Fachschule, the necessary funds are provided out of tax revenue and are thus part of the budgets of the Länder and the communes. But, as already mentioned, the vast majority of the institutions concerned with adult vocational training are *privately-run*, i.e. non-state. However, the importance of the task they perform in the field of education and training cannot be overestimated (contributing towards equality of opportunity, both vocational and social); they are also important to the labour market in that they help towards harmonization of supply and demand in qualifications. It is therefore a matter of vital interest to society generally, and to employers and workers in particular, that these institutions should continue to function fully and that they should be expanded, and their number increased still further, as far as this proves necessary. But this is primarily a question of funds. One of the most important tasks of the Employment Promotion Act in this connection is the '*institutional promotion*' of vocational training. Under Article 50, para. 1 of this act the Federal Institute of Labour can 'give loans and grants for the setting up, the expansion and equipment of establishments, including group training workshops, which serve to provide vocational training, further training or retraining...'. In special cases the promotion can be extended to cover the maintenance of such establishments.

But this alone does not ensure that the further training and retraining (also vocational rehabilitation) opportunities offered are taken full advantage of, in the interests of individuals as well as the economy as a whole; for these reasons the Employment Promotion Act also makes provision for '*individual promotion*' of vocational training. Undergoing further vocational training, retraining or rehabilitation courses could, in many cases, result in financial difficulties, which would deter many from taking part in adult vocational training. For this reason, participants in such measures can, in certain circumstances which cannot be gone into in detail here, be given a maintenance allowance. Furthermore, costs arising directly from the training measures can be

reimbursed partially or in full; these include course fees, the cost of learning aids and travel expenses.

Expenditure on individual promotion of further training and retraining (including maintenance payments) under the Employment Promotion Act amounted to over DM 13 thousand million in all for the period 1970–1978. In 1979 the Federal Institute of Labour provided DM 743.8 million for rehabilitation measures catering for 36 600 people.

Here it must be mentioned that the funds of the Federal Institute come from contributions paid by employers and workers, so that we have a kind of self-financing of adult vocational training. A problem arises from the fact that when there is high unemployment at the base of the employment pyramid, the financing fund becomes smaller and in consequence less money can be made available for further vocational training. Yet in times of high unemployment the need for further training, retraining and similar measures is likely to increase rather than decrease.

7. SPECIAL FORMS OF VOCATIONAL TRAINING

7.1 Dual-qualification training courses

Dual-qualification training courses have been a subject of discussion in the Federal Republic of Germany for the past decade and are being tried out in pilot projects but this does not mean, as might be initially assumed, that two *vocational* qualifications are imparted and certified in one course of training. Rather are they courses through which both a *vocational qualification* and an *entrance certificate* to a higher level of general education (usually university or a specialized college with university status) can be acquired.

The most diverse variants of dual-qualification courses are currently being tried out in about thirty pilot schemes. The main initiator for developing and trying out such courses was the Education Commission of the German Council for Education (**Deutscher Bildungsrat**) with its 'Structural plan for the education system' (1970). In this it was suggested that experiments be made with integrated forms of vocational schools with a **Gymnasium** upper level and, conversely, **Gymnasium** upper levels with vocational schools. This results in two variants of dual-qualification training courses, to the extent that one can take the *institutional combination* as a differentiation criterion. One group of dual-qualification courses is, organizationally and under school law, assigned to the upper level of the **Gymnasium**, another to the vocational schools, in particular **Berufsfachschulen** and **Fachoberschulen**.

Another differentiation criterion is the *kind of qualification for further study which can be acquired*: the entrance certificate for a specialized college with university status and/or the general university entrance certificate. Lastly, depending upon the type of pilot scheme and, therefore, of training course, *different vocational qualifications* are imparted.

These can be partial or full qualifications at skilled worker level or qualification as a technician (who, as far as his theoretical qualification is concerned, comes above the 'master' but below the engineer) or qualifications for the 'assistant' (**Assistent**) occupations (e.g. mathematics-natural sciences). This results in the following qualification combinations:

Fig. 26 Dual-qualification courses – qualification combinations

Entrance certificate for Qualification	Specialized college with univ. status	University
Partial qualification[1] in a skilled occupation included in the dual system (e.g. industrial clerk)	X	X
Full qualification in a skilled occupation included in the dual system (e.g. laboratory technician)	X	X
Technician qualification (e.g. state-examined technician, electro-technology)	X	
Qualification in an **Assistent** occupation (e.g. technical assistant – chemicals)	X	X

These are the most common qualification combinations and typical of the dual-qualification training courses in their present stage of development. It can be seen that nearly all vocational qualifications can be acquired in combination with either specialized college or university entrance certificates. An exception is the qualification of technician which, at present, can be gained only in conjunction with the entrance certificate for a specialized college. Here the extensive and highly specialized knowledge of a technician is a factor as only a small part of it can be covered, or replaced, by contents which are generally understood to be an indispensable part of the general university entrance certificate.

The specialized college entrance certificate (**Fachhochschulreife**) is, in any case, more strongly oriented than the general university certificate (**Hochschulreife**) to industry/economics vocational contents – varying with the type of specialization. Here we see that integrated teaching for both a vocational qualification and a qualification for further study presents particular problems. To what extent are there learning contents which are the same, or similar, or of equal importance for both qualifications? This is more likely to be the case in occupations where the accent is on theory, as in chemistry, physics, mathematics, electrotechnology and certain clerical occupations, than in those where the qualification profile places the emphasis on manual skills. But where lack of identity in content means a considerably longer training course one asks what is the point of dual-qualification training. Thus it is no mere coincidence that in the

1 This means that *parts* of the knowledge and skills demanded in the skilled occupation description and the outline training plan (cf. p. 84 et seq.) are imparted.

171

current pilot schemes qualifications for occupations where there is a *strong emphasis on theory* are to the fore.

Various arguments are advanced for the development and establishment of dual-qualification training courses:

- In and through such courses the *combination of general and vocational learning* – so often demanded in the Federal Republic – is to be realized in a model fashion.

- Where vocational qualifications of the practical-manual kind are in the foreground in dual-qualification courses, as, for example, in the **Waldorf-Schulen** (a special form of private school), one-sided cognition and over-emphasis on the theoretical side of the learning process will be countered

- With university places scarcer and competition among academics on the labour market keener, dual-qualification courses are expected to have a certain *steering effect*. A person who has, in addition to the general university entrance certificate, a vocational qualification that is in demand on the labour market, will not – it is assumed – embark on higher education in every case and in all circumstances. However, if he wishes to do so and there is no suitable university place for him within the foreseeable future, then the vocational qualification he has acquired in the dual-qualification course will have a bridging function. Nevertheless, it has not yet been possible to demonstrate empirically whether these courses really are effective in this way.

- Lastly, it is also being argued that, with the working world becoming increasingly scientific, more and more occupations will (perforce) have a greater theoretical emphasis, and that dual-qualification courses will cater for this trend. But opinions are completely divided on this. In particular, critics of these courses fear that, in the end, general education could predominate overwhelmingly and the vocational qualifications aimed at would be so remote from practice and de-specialized that their usefulness would be questionable.

As has already been mentioned, dual-qualification courses are normally of an experimental nature at present, so it remains to be seen whether this new departure in vocational training policy and vocational pedagogics will prove viable in an expanded form in the years to come.

7.2 Vocational distance learning

The following survey of vocational distance *learning* is limited in that it excludes distance *study at academic level*, aimed at academic qualifications, as offered by the Federal Republic's only open university (**Fernuniversität**) at Hagen.

Like all other distance learning, the primary characteristics of the vocational kind are that

- teachers and students, and the students themselves, are all, or mostly, separated by distance and

- the distance is bridged by the use of one medium or several (printed teaching material, records, tapes, cassettes, radio, film, television).

Vocational distance learning enables students to acquire vocational qualifications, and the emphasis, both in kind and volume, is on *further vocational training*. Most of the *private* distance learning institutes work mainly with *printed teaching material*, known as **Lehrbriefe**.

Until the passing of the Vocational Training Act in 1969 there was hardly any effective control of distance learning institutes and the quality of their vocational instruction. Alongside the few reputable institutes there existed many others whose offers of tuition, promises and business practices led to disappointment and demotivation among the participants.

With the VTA came the first step to improve the conditions and quality of vocational distance learning. In the act the Federal Institute for Vocational Training Research[2] was expressly charged with examining vocational distance learning courses when requested to do so by the institutes which offer them and, if satisfied, to recognize them as being approved. In addition, it was to examine the instruction given and make suggestions for its further development and organization.[3]

On 1 January 1977 there also came into force a law to protect participants in these courses, the *Distance Learning Protection Act* (**Fernunterrichtsschutz-Gesetz**). Together with regulations concerning the distance learning contract and other conditions for this field, this act also includes a regulation (Article 13) governing the licensing of *vocational* distance learning courses. Pursuant to this, a licence can be refused if, among other reasons, the content, duration and method of implementation of the course do not conform with the objectives of vocational training as laid down in the Vocational Training Act. On 1 January 1971 a *Central Office for Distance Learning* (**Staatliche Zentralstelle für Fernunterricht**) was established in Cologne on the basis of an agreement between the Federal Länder, and its competencies were extended in new agreements in 1974 and 1978. Its main task is to ensure that the regulations contained in the Distance Learning Protection Act are adhered to, and this also applies to courses providing vocational training (Art. 7, para. 2 of the Länder agreement). But the Central Office decides[4] upon the licensing of courses providing *vocational* instruction only in agreement with the Federal Institute for Vocational Training (Art. 9). The very complicated legal foundations and regulations for distance learning, and the vocational kind in particular, which are given here in a drastically reduced form, are an indication that distance learning is an established factor in the field of vocational training. But, because the distance learning institutes are mainly in private hands, it has been found that they require very close regulation.

By their very nature, vocational distance learning courses which prepare candidates for state examinations or examinations under public law are of particular importance. In 1981 some one hundred and twenty distance learning vocational training and further training courses were being offered by about thirty privately-run institutes. The courses prepare students for ten different qualifying examinations, the main examining bodies being the Chambers of Industry and Com-

2 Now the Federal Institute for Vocational Training. See p. 57.

3 Corresponding regulations are included in the Vocational Training Promotion Act which came into force on 1.1.1982.

4 In certain cases.

merce and state schools for technicians. Specialization is in two main fields: further training for the qualification of technician, and for higher grade employment (i.e. above the initial skilled worker qualification) in commerce – **Fachwirt** and **Fachkaufmann**.[5]

7.3 Special training courses in industry, commerce and the crafts for holders of the university entrance certificate (Abiturienten)

In 1972, 89.7% of those qualified to proceed to higher education intended to do so, but in 1986 the figure was only 59.1%,[6] with absolute numbers increasing (up to 1983), and competition for university places becoming keener, these young people no longer regard tertiary education as the only choice open to them. Approximately every sixth young person who secured the university entrance certificate (through the **Abitur** examination, hence the term **Abiturienten** for these young people in the Federal Republic) in 1976 completed a vocational training course in 1978 which can formally be regarded as an alternative to university study.

More and more young people qualified to proceed to higher education have decided to undergo training in the dual system. Early 1986, 218 000, i.e. 12% of all trainees, had an entrance certificate either for university (Hochschulreife) or for a specialized college with university status (Fachhochschulreife). Most of these are women who have decided to undergo practical training as opposed to studying. Whilst more than a third of the trainees in the banking, clerical (industry) and insurance sectors are qualified to study, in a number of occupations (e.g. accountant, Werbekaufmann (advertising sector), Datenverarbeitungskaufmann (data processing sector)) three quarters come from grammar schools and the Fachoberschule.[7] At present approx. 30 000 craft aprrentices have a university entrance qualification, i.e. 5% of all craft trainees.

The special training courses for **Abiturienten** developed in the economy since the early 1970s cater for the fact that an increasing number of them are prepared to undergo more practice-oriented courses of vocational training. A feature these special courses have in common with training in the dual system is that trainees learn both on the job and in schools, or under school-like conditions at least. As in training under the dual system, every participant in these special courses has a contract with a firm, but this does not have to conform with the norms and regulations prescribed in the Vocational Training Act.

The special courses also differ considerably from vocational training within the dual system in two respects:

– 'Trainees' undergoing the special courses hold at least the entrance certificate for a *specialized college with university status* (**Fachhochschulreife**) and most have the general university entrance certificate (**Hochschulreife**). This is a prerequisite for admission to these courses and, at the same time, it ensures a specific standard. As is well known, a particular

5 Cf. Storm, U.: Prüfungen für Teilnehmer an berufsbildenden Fernlehrgängen, in: BWP 3/81, p. 22.

6 Federal Statistical Office, Wiesbaden (Pub.): Studien- und Berufswünsche der Abiturienten (working document) Wiesbaden, September 1986, p. 7.

7 Cf. Federal Institute for Vocational Training, Press Release of 4.11.1986.

school-leaving certificate is not required for admission to vocational training under the dual system.

- As a rule, the qualifications and certificates acquired in these special courses are *well above the level of the skilled-worker examinations* and this is particularly true of the theoretical basis and scientific orientation despite the strongly practice-related nature of the courses.
- Special training courses normally last *longer* than training under the dual system – three years. It is true that the latter form also lasts three years, but the course is usually shortened by at least a year for **Abiturienten**.
- Whereas *graduated* training[8] is an exception within the dual system, in the special courses it is *the rule*. The first stage, culminating in the acquisition of a vocational qualification, lasts one and a half to two years. After another year the course ends with an examination; this is the first stage for the occupation of **Wirtschaftsassistent** (an industrial clerk who is sufficiently trained to act as personal assistant to a manager) or industrial clerk.

The most important special training courses lead to qualifications as

- **Wirtschaftsassistent**
- **Handelsfachwirt** (commerce)
- **Betriebswirt** (management)
- Engineer, and
- Mathematical-technical assistant (who would, for example, assist a qualified engineer).

We can differentiate between *three variants* of special training courses for **Abiturienten** according to the learning venues and institutions involved in training:

- in-firm courses in industry, commerce and the service industries,
- courses within the sphere of a vocational academy (**Berufsakademie**),
- courses run in conjunction with administrative and commercial academies (*Verwaltungsakademien, Wirtschaftsakademien*).

In the case of the *in-firm* special courses, either the practical and theoretical contents are taught within the undertaking, or the practical part in the firm and the theoretical in a branch-specific training centre. In the courses linked to the *vocational academies*, the practical part is taught in the firm and the theoretical mainly in the academy, with practical and theoretical phases alternating.[9]

---

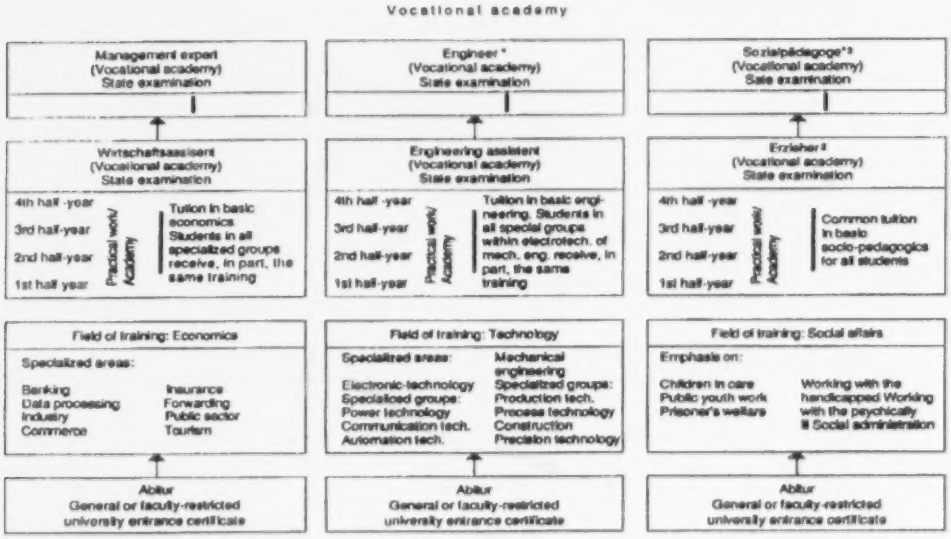
8 See p. 117 et seq.

9 The first vocational academies were established in Baden-Württemberg and Schleswig-Holstein in 1974.
Cf.: Zabeck, J., B. Weibel and W. Müller: Die Berufsakademie Baden-Württemberg. Abschlussbericht über die wissenschaftliche Begleitung des Modellversuchs, Mannheim, 1978.

In this variant the trainee is a student at a vocational academy and, at the same time, has a contractual training relationship with a firm or some other training establishment, e.g. one maintained by the social services. Of 2 600 or so students at the **Berufsakademie Baden-Württemberg** (end of 1980) just under three-fifths were in the commercial section while the remainder were divided more or less equally between technology and social studies. A total of just under 700 firms make training places available for this academy.

In courses run in conjunction with *administrative and commercial academies* of the kind which already existed in a region (i.e. were not specially founded for the implementation of special training courses for **Abiturienten**, as the vocational academies were) the academies implement the theoretical instruction for the firms. Unlike the vocational academies, however, they are concerned only with special courses in the *clerical* field.

Fig. 27 Training courses within the framework of the vocational academies (**Berufsakademien**)

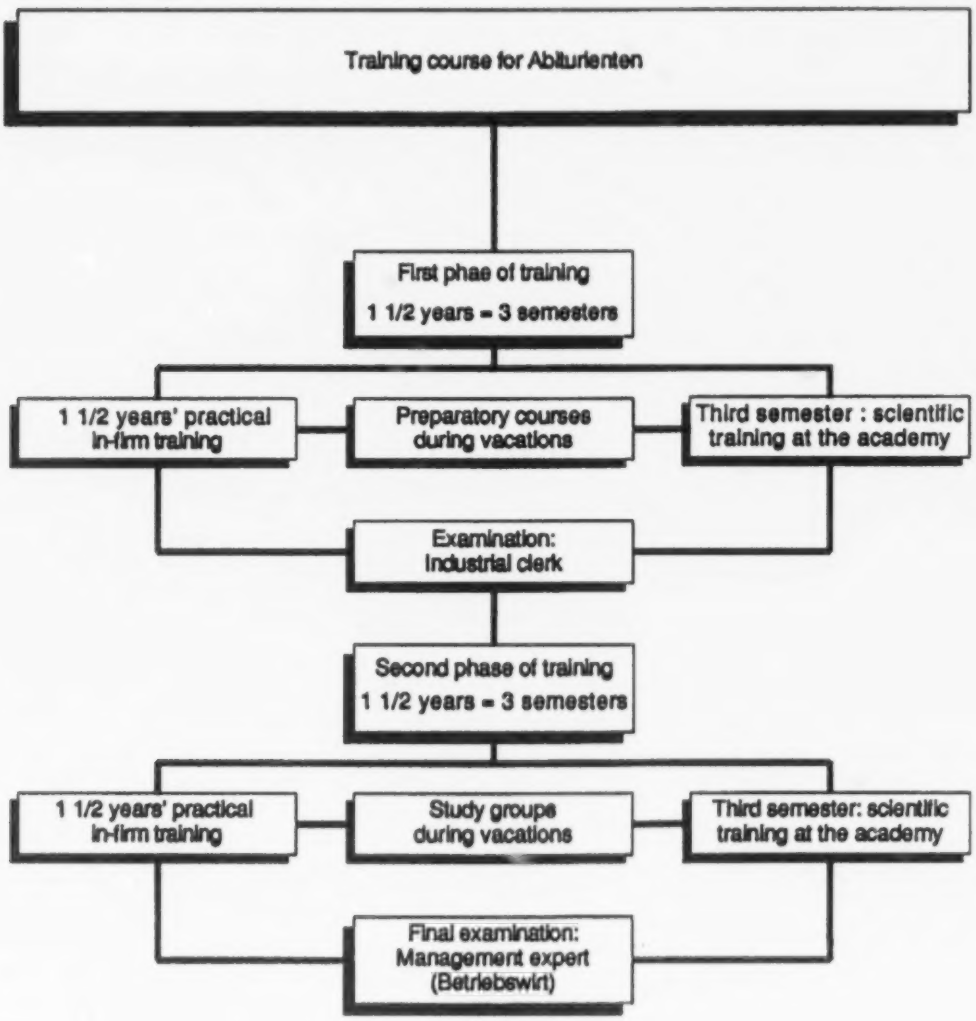


* Courses only at the Berufsakademie Baden-Württemberg. Source: Berufsakademie B-W. Ministrium für Wissenschaft und Kunst (Pub.): Stuttgart 1979.
1) Kramer, W. and G. v. Landsvberg: Abiturientenprogramme und Traineeprogramme in der Wirtschaft, Berlin 1981, pp. 28 and 34.
2) Cf. list of terms, p. 209.
3) Training lasts six semesters and qualifies the Sozialpädagoge to take charge of a kindergarten, children's home, etc.

'The establishment of the Berufsakademie Baden-Württemberg was an attempt, oriented to the principle of pedagogic differentiation, to create, alongside the universities and specialized colleges with university status in the tertiary field, an institution which would correspond to the training and vocational interests of a certain type of Abiturient and also be suitable for satisfying the qualification requirements of firms at the higher level of dispositive-operative demands.' (p. VI).

Thus vocational academies were founded for the express purpose of developing special training courses for Abiturienten. They are below tertiary level.

Fig. 28 Training for **Abiturienten** in cooperation with administrative and commercial academies (**Verwaltungs- und Wirtschaftsakademien**)[10]


Training course for Abiturienten
First phae of training
1 1/2 years = 3 semesters
1 1/2 years' practical in-firm training
Preparatory courses during vacations
Third semester : scientific training at the academy
Examination: Industrial clerk
Second phase of training
1 1/2 years = 3 semesters
1 1/2 years' practical in-firm training
Study groups during vacations
Third semester: scientific training at the academy
Final examination: Management expert (Betriebswirt)

Whereas in 1977 two hundred firms made a total of four thousand training places available for all three forms of special training courses, the number has meanwhile grown to eight hundred undertakings with six thousand places in all.[11] Bearing in mind the data which still apply, such as large numbers of **Abiturienten**, scarcity of university places and, overall, a narrower labour

10 Kramer, W. and G. v. Landsberg: Abiturientenprogramme und Trainee-Programme in der Wirtschaft, Berlin 1981, pp. 28 and 34.

market for graduates, it is likely that the upward trend in special training courses will continue. And here it must be appreciated that these training courses are very much in the interests of the firms which, with their aid, gain a qualification potential oriented to their particular requirements. With the current shortage of engineering graduates these special courses can also contribute towards filling a gap.

But the development of special training courses, and the founding of the vocational academies in Baden-Württemberg and Schleswig-Holstein associated with them, has been the subject of criticism, especially from the trade unions. They maintained that the vocational qualifications imparted in the special courses at the vocational academies did not take into account the need for occupational mobility, or did so to only a very limited extent. Replying to this criticism of training directed exclusively to the needs of private enterprise, the champions of special training courses assert that the vocational academies are state institutions, and the necessary steps could therefore be taken to counter such a trend.

In principle, the close linking of practical activity and theoretical reflection in these courses is to be viewed as a positive development from vocational-pedagogic aspects too. Possibly the danger of training becoming too narrowly firm-related could be countered by firmer direction, as is provided by the Vocational Training Act in the case of training under the dual system.

7.4 Trainee[12] programmes in industry and commerce

The term 'trainee' is now also widely used to describe graduates of universities and specialized colleges with university status who, with the aid of special initiation, orientation and training measures, are prepared in industry and commerce for the tasks they will undertake in firms in due course. These measures are based on the assumption, borne out by experience, that while graduates have the scientific basis for their future work, they are, to a large extent, unable to translate this knowledge into concrete occupational activity, be it as an engineer, economist, lawyer, teacher or doctor. In the public service it is the task of the preparatory service (**Referendariat**), building upon the academic qualification and bearing in mind the concrete demands of the job in practice, to give instruction that will enable the trainees to practise their profession as prosecuting counsel, secondary school teacher, doctor and so on.

Trainee programmes in industry and commerce are, to a certain extent, the equivalent of the state's preparatory service; but as every undertaking is autonomous and free to draw up its own programme, and there is no generally-recognized concept, there are very many variants. This is also due to the widely differing philosophies of individual firms, and their equally diverse operational conditions, tasks and requirements. It is therefore not surprising that while most firms are aware of the need to introduce graduates, in one way or another, to the duties they will be required to perform, they do not, by any means, carry out all the measures which constitute a full trainee 'programme'.

---

11 Cf. iwd, Informationsdienst des Instituts der Deutschen Wirtschaft, Jg. 6, Nr. 29, of 29.7.1980.

12 Translator's note: The English word 'trainee' has been widely adopted in the Federal Republic for these graduates and will be used in this sense throughout this section.
The reader will be aware that elsewhere in the study 'trainee' is synonymous with 'apprentice'.

The Institute of the German Economy (**Institut der Deutschen Wirtschaft**) carried out a survey of the integration of graduates who are not being trained within the framework of trainee programmes, and this produced the following results:

Tab. 35 In-firm induction measures for graduates accompanying, or in place of, trainee programmes

	As percentage of a sample of 518
Induction on the job, through predecessor, colleagues or supervisor	21.6
Occupation-related seminars/courses	10.2
Training plans	6.4
Rotation	6.2
Further training measures	5.8
Information brochures	5.2
Management seminars	5.2
Visits to firms	4.3
Printed material, Office/works rules, Departmental instructions	4.1
Basis seminars	4.1
Job-specific lectures	3.1
General induction sessions	3.1
Team-work, learning while working	2.5
Business report, statement of results	2.3
Supra-departmental information	2.1
Informative/advisory discussion	1.9
Technical literature	1.7
Induction by way of appropriate tasks	1.5
Instruction sheets, guidelines	1.4
Records, drawings, product familiarization	0.8

Source: Institut der Deutschen Wirtschaft 1980.

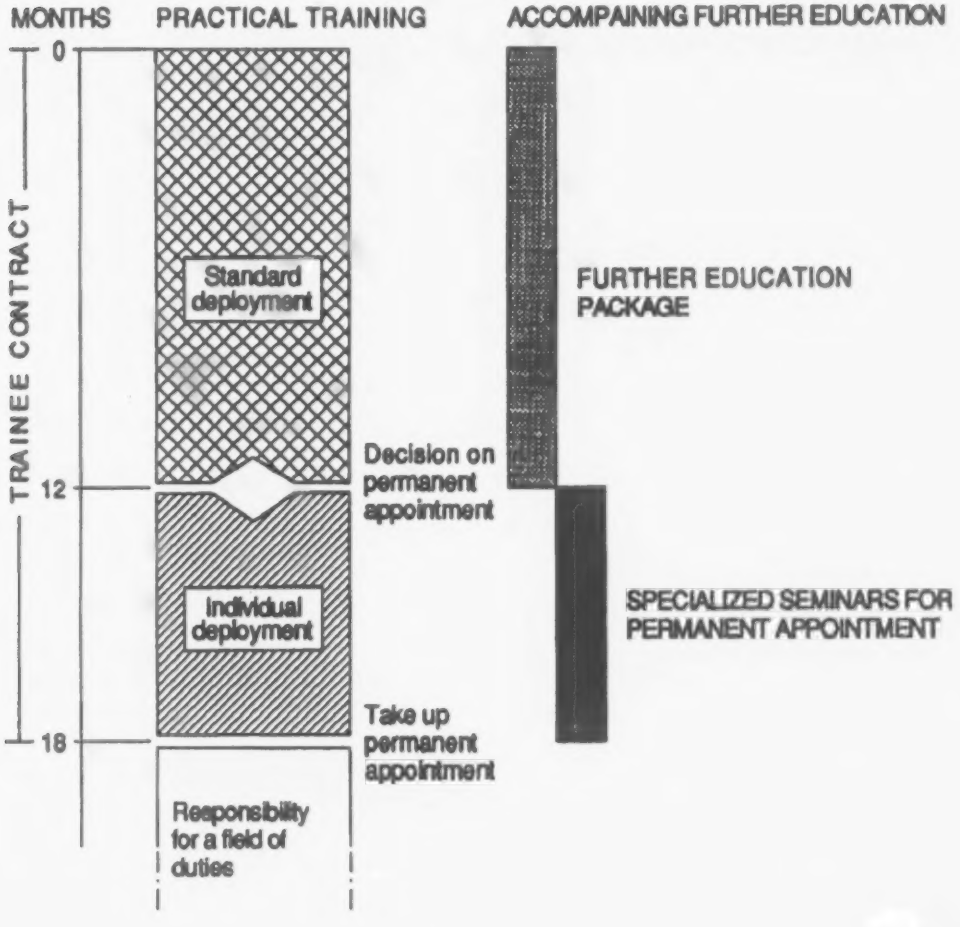
Thus the main alternative to a trainee programme proper is on-the-job training. An analysis of the concrete trainee programmes of various undertakings shows they differ from the individual measures listed above in that they are a combination of these methods. In addition, the degree of vocational-pedagogic and didactic intention is far greater. They are, to a certain extent, the outcome of carefully directed reflection and planning and, because of the various training elements involved, generally last far longer. An automobile firm quotes the following objective for its eighteen-month practical training course with accompanying further education:

- Knowledge of the entire undertaking and its products
- Basic knowledge of, for example, product-related technology
- Mastery of working techniques

- Knowledge of the tasks and functions of a department and its interaction with the other departments of the enterprise
- Ability to perform demanding tasks oneself
- Behavior expected of qualified younger staff.

The schematic course of this trainee programme is shown below:

Fig. 29 Schematic course of the trainee programme[13]



13 Based on: Kramer, W. and G. v. Landsberg: Abiturientenprogramme und Trainee-Programme in der Wirtschaft, Berlin 1981, p. 106.

8. VOCATIONAL PREPARATION AND INTEGRATION MEASURES FINANCED BY THE LABOUR AUTHORITIES

8.1 Survey of the measures

Within the framework of their labour market policy the labour authorities (the Federal Institute of Labour together with the Land Employment Offices and local employment offices) initiate and finance courses for *vocational preparation* and the *improvement of integration prospects*. These measures, which take the form of full-time courses, do not lead to a vocational qualification, nor are they 'schools' in the public law sense. Nevertheless, they are a noteworthy element within the spectrum of vocational training.

They consist of the following:

- Basic training courses
- Promotion courses
- Courses to improve integration prospects
- Measures for the vocational preparation and social integration of young migrants.

As has already been mentioned, the labour authorities initiate and finance these courses, but they do not implement them. Implementation is the task of various providers such as firms, Chambers, the Christliches Jugenddorfwerk Deutschlands, the Kolpingwerk, the Internationaler Bund für Sozialarbeit, etc.

The courses are intended, in particular, to help ensure that

1. neither unemployment nor a shortage of labour shall occur or persist, nor shall workers be engaged on tasks below the level of their qualifications, ...

4. the vocational integration of physically, mentally or psychically handicapped persons is promoted, ...

6. older workers, and others difficult to place under normal labour market conditions, are vocationally integrated,... .[1]

They last up to one year and are run as *open courses* or *residential courses*. The latter are intended, in particular, for young people who, because of the nature and extent of their behavioural deficits, need to be temporarily placed in new social surroundings and live there in a community, with socio-pedagogic care.

Financing of the courses by the labour authorities covers both the *institutional* costs and the *individual* promotion of participants through training allowances, payment of course fees and so on.

---

1 Article 2, Employment Promotion Act.

8.2 Basic training courses

These prepare young people for the demands that are made on apprentices at the place of work. Basic knowledge and skills for several occupations within an occupational field are imparted, without anticipating the first year of training.

The basic training courses are directed towards would-be trainees who

- opt for a training place when given vocational guidance but, because of a shortage of suitable openings, cannot embark on vocational training or,
- as inmates of juvenile detention centres, wish to prepare themselves for the transition to infirm vocational training.

Tab. 36 Participants in basic training courses[2]

Year	Participants
1982/83	3 732
1983/84	9 533
1984/85	11 203
1985/86	13 297

Just under two thirds of the participants in basic training courses are girls. The participant structure thus reflects the general situation on the market for training places. There is much less chance of girls finding a training place which meet their aspirations than boys when the general situation is that of a shortage of training places. In the coming years an easing of the market of training places is to be expected and this is likely to result in a drop in the number of participants in basic training courses.

8.3 Promotion courses

These *prepare young people for on-the-job training in a recognized skilled occupation*, that is to say the courses are intended to make them *capable of undergoing training.*

Participants in promotion courses are school-leavers who are 'not yet ready to follow an occupation and who

- have the ability to take up vocational training but need initial help because, owing to temporary developmental physical or psychological difficulties, they are not yet equal to the stresses of vocational training, or are,

2 Federal Labour Office: Statistics on completed vocational preparation measures (excluding rehabilitation measures) in the field of vocational guidance. Period under report: 1.10.-30.9. for each year.

- as a rule, leavers from special schools for those with learning difficulties, or comparable Hauptschule leavers, who, because of the irremediable nature of their learning difficulties, need the special help a promotion course will provide'.[3]

  Thus the participants are young people whose inability to take up training is due to temporary developmental difficulties or to learning difficulties.

Tab. 37 Participants in promotion courses[4]

1982/83	8 983
1983/84	9 115
1984/85	8 882
1985/86	9 245

8.4 Training courses to improve integration prospects

These prepare handicapped persons who cannot be considered for training in recognized skilled occupations, or those skilled occupations which are covered by special regulations for the handicapped, for qualified work either on the labour market or in a workshop for the disabled.

Tab. 38 Participants in courses to improve integration prospects[5]

1982/83	4 249
1983/84	4 849
1984/85	4 006
1985/86	5 342

8.5 Measures for the vocational preparation and social integration of young migrants

These courses are intended to help reduce the language and general training deficits of young migrants and so improve their prospects on the labour market. Measured against the number of young foreigners who need such promotion, the number of participants is relatively small. The first courses did not begin until 1979. Whilst in 1982 there were as many as 13 692 participants,

3 Information for the advisory and placing services of the Federal Institute of Labour, Nuremberg, 1979, No. 15, p. 602.

4 Federal Labour Office: Statistics on completed vocational preparation measures (excluding rehabilitation measures) in the field of vocational guidance. Period under report: 1.10.-30.9. for each year.

5 Ibid.

there were only 3 021 in the period 1985/86.[6] This great drop in the number of participants is above all due to the lowering of the age to 16, the age at which family members may enter the country to join their relatives.

The extent to which the courses described here help these young people to take up vocational training, enter into a skilled occupation or secure a job, that is to say what 'degree of effectiveness' they have, depends largely on the organization of their contents. In accordance with the objectives of the promotion courses and those for improving integration prospects, the instruction plans are a combination of practical tuition, with accompanying theoretical tuition, and a socio-pedagogic element.

It is not considered that their primary task, at this stage, is to impart occupation-related knowledge and skills. The basic training courses are another matter; there the imparting of occupationally useful knowledge and skills is in the foreground. In the 'Measures for the vocational preparation and integration of young migrants' the *remedying of language deficits* is – together with vocational orientation and preparation – an important objective. Because of the multiplicity of providers, there 's a danger that the particular objective or concept is not always, or only partially, adhered to, and the difficulty of exercising control over the courses and providers is also a factor.

In objective and content the courses are, for the most part, comparable to the school-based *vocational preparation year*, but they do not equate to the *Basic Vocational Year*[7] or the Berufsfachschule.[8] And even though reservations are expressed about these courses here and there, they do produce remarkably good results, as the example of the following table covering the years 1985/86 shows.

6 Ibid.

7 Cf. p. 110 et seq.

8 Cf. p. 121 et seq.

Tab. 39 Vocational preparation measures – 1985/86[9]

	Promotion courses (for school-leavers)	Courses to improve integration prospects	Basic trg. courses for young unemployed persons
Total number of participants	9 245 = 100%	5 342 = 100%	13 297 = 100%
Entry into recognized skilled occupations	3 649 = 39.5%	440 = 8.2%	7 680 = 57.8
Trg. courses under Art, 48, VTA, Art. 42 b Crafts Code	1 257 = 13.6%	360 = 6.7%	171 = 1.3%
Entry into Berufsschulen	469 = 5.1%	161 = 3.0%	322 = 2.4%
Entry into employment	613 = 6.6%	916 = 17.1%	1 056 7.9%
Continuation of vocational prepn. measures	209 = 2.3%	649 = 12.1%	155 = 1.2%
Change to other vocational prepn. measures	706 = 7.6%	826 = 15.5%	275 = 2.1%
Drop outs, further development unknown	882 = 9.5%	604 = 11.3%	1 499 = 11.3%
Others	721 = 7.8%	653 = 12.2%	1 051 = 7.9%
Participants not yet placed	739 = 8.0%	733 = 13.7%	1 088 = 8.2%

9 Federal Labour Office: Statistics on completed vocational preparation measures (excluding rehabilitation measures) in the field of vocational guidance. Period under report: 1.10.-30.9. for each year.

9. VOCATIONAL TRAINING RESEARCH AND FINANCING OF VOCATIONAL TRAINING

9.1 Vocational training research

Over the past twenty years, increasing importance has been attached to vocational training policy. This brought a corresponding expansion of the research potential for an area which has not, as yet, been the subject of close scientific investigation. The following are the main institutions in which vocational training research is carried out on a substantial scale:

- faculties and institutes of vocational and economics pedagogics of the universities,
- Federal Institute for Vocational Training,
- Institute of Employment Research at the Federal Institute of Labour.

The faculties, institutes and seminars of *vocational pedagogics* and *economics pedagogics* at most *universities* and *integrated universities* in the Federal Republic are concerned not only with the training of teachers for the vocational schools but also – in accordance with the unity of teaching and research at the academic universities – conduct vocational training research. And although the personnel and financial resources at the individual universities are relatively small, together (about thirty) they represent a considerable potential. The passing of the Vocational Training Act in 1969 brought the establishment of the Federal Institute for Vocational Training Research and this became the *Federal Institute for Vocational Training* when the Training Place Promotion Act came into force on 7 September 1976.[1] The Institute has two seats, with a staff of about 300 in *Berlin* and 60 in *Bonn*. With a total of 160 scientific staff members it is the largest vocational training research institute in the Federal Republic of Germany and is financed for the main part from the budgetary funds of the Federal Government; in 1987 the Institute's budget was about DM 32.6 million.

The research tasks[2] of the Federal Institute for Vocational Training are divided between six main departments:

1. Structure research, planning, statistics
2. Curriculum research
3. Training Ordinance research
4. Adult vocational training research
5. Media research
6. Financing.

---

1 Superseded by the Vocational Training Promotion Act, which came into force on 1.1.1982.

2 The Institute also has other tasks. See p. 58.

The research programme is decided by the *Central Committee*[3] of the Institute, which is a kind of 'self-administering parliament' consisting of eleven representatives of the employers' central organizations, eleven trade union representatives, eleven representatives of the Länder and five representatives of the Federal Government (likewise having eleven votes). One representative of the communal central organizations and one representative of the Federal Institute of Labour are advisory members. The Federal Institute not only conducts vocational training research but also commissions other research establishments to carry out studies in the various areas of vocational training and conducts or assists in the scientific monitoring of pilot projects where these are in the hands of other research institutes or groups.

Under the Employment promotion Act of 25 June 1969, the Federal Institute of Labour is required to carry out labour market and vocational research and to create the necessary organizational and technical prerequisites for this work. The FIL met this requirement by establishing its own *Institute of Employment Research* in *Nuremberg*, with a staff of about eighty, fewer than half of them being scientific personnel. The main emphasis of vocational research and vocational training research (the borders of these two areas are fluid) is on investigation into the course of vocational training and individual occupations, into occupational structures and qualifications, the problems of flexibility and mobility, and the effects of technical developments on occupational structures, and the labour market. Like the Federal Institute for Vocational Training, the Institute of Employment Research (**Institut für Arbeitsmarkt- und Berufsforschung**) maintains an extensive publication service.

In addition to other institutes and offices such as the Munich State Institute for School Pedagogics (**Münchner Staatsinstitut für Schulpädagogik**) and the Pirmasens Office for Vocational and Labour Pedagogic Learning (**Pirmasenser Arbeitsstelle für berufs- und arbeitspädagogisches Lernen**), most of which have been set up by the Länder and concentrate mainly on curriculum research and the monitoring of pilot projects, partially or exclusively in the field of vocational training, mention must also be made of the Max Planck Institute for Educational and Vocational Training Research in Berlin (**Max-Planck-Institut für Bildungsforschung**). About one quarter of the research personnel of this institute are engaged in vocational training research (including educational economics). And lastly there are quite a number of other institutes, with various providers, which carry out vocational training research to only a limited extent or merely sporadically. Examples of these are the Institute of the German Economy (**Institut der Deutschen Wirtschaft**) in Cologne and the Economics and Social Science Institute of the Trade Unions (**Wirtschafts- und Sozialwissenschaftliche Institut der Gewerkschaften**) in Düsseldorf.

3 See p. 57.

9.2 Financing of vocational training

The multiplicity and diversity of those administering, providing and implementing vocational training measures are reflected in the system of financing training. In this section a description will be given of the sources and methods of financing in the most important areas of vocational training.

9.2.1 Financing of vocational training in firms

The financing of both initial and further training is a matter for the *firms*. This expenditure represents costs with which prices are duly burdened, as far as the market permits. So, from the managerial point of view, in-firm vocational training is a not inconsiderable cost factor. Some of the expenditure on the training of apprentices is, however, offset by their contribution to production during the training period, i.e. in the form of financial returns. In the case of further training, however, there is rarely any financial return.

A representative survey of firms' expenditure on training and further training in the Federal Republic was carried out for the first time for the year 1971/72[4] and it was established that the training firms had expended DM 5.3 thousand million net on apprenticeship training. The financial return from the trainees' work over that same period was about DM 3.4 thousand million, which brought the gross costs to DM 8.7 thousand million. The expenditure on further training, where gross costs are essentially the same as net costs, was DM 2.1 thousand million.

According to an investigation conducted by the Institute of the German Economy (**Institut der Deutschen Wirtschaft**), private sector firms spent DM 28.2 thousand million net on training in 1980, DM 20.2 thousand million of this being devoted to in-firm apprenticeship training.[5]

The biggest single item is *personnel costs* (trainers' salaries, continued payment of wages and salaries to those participating in further training schemes, training remuneration). Personnel costs for trainees vary between 32% and 64% of the gross costs, depending upon the occupation.

Examination of the training costs of the individual firms reveals considerable variation in the average gross and net costs per trainee per annum, and they vary according to the *size of the firm*, the *branch of the economy*, and the *skilled occupation* for which training is being given. On average, the expenditure in large firms is higher than in smaller ones; where a large proportion of the training takes place in a training workshop, costs are higher than in those firms where training is given mainly at the workplace. Differences in costs also result from the fact that *training remuneration* varies from one occupation to another, and from one collective agreement

---

4 Report by the commission of experts on the costs and financing of vocational training: Kosten und Finanzierung der ausserschulischen beruflichen Bildung, Abschlussbericht, Bielefeld 1974.

5 Falk, R.: Kosten der betrieblichen Aus- und Weiterbildung. In: Berichte zur Bildungspolitik des Institutes der Deutschen Wirtschaft, Cologne 1982. Cf. also: Noll, I. and others: Nettokosten der betrieblichen Berufsausbildung. Pub.: Federal Institute for Vocational Training. Berlin and Bonn 1983.

area to another. The highest training remuneration (1984) is paid to mining mechanics (DM 1 034 per month, on average), the lowest in ladies' tailoring (DM 196 in the third year).

The recommendations of a commission of experts[6] to the effect that financing by individual firms should be replaced by so-called *fund financing* has met with a varying response from the political parties and the two sides of industry. Acceptance of these recommendations is not under discussion at present.[7]

9.2.2 Financing of vocational training in group training workshops/centres

This learning venue is financed largely from public funds in the form of *grants* from the Federal Institute of Labour, the Federal Government and the Länder, also *loans* from the Federal Institute of Labour. In addition, the provider of the group training centre (e.g. a Chamber) also makes a contribution in every case. Unlike the investment costs, the running costs are partially covered by *contributions* from the training firms.

9.2.3 Financing of vocational training in schools

It has already been mentioned that responsibility for the vocational schools rests with the Federal Länder; the financing of such schools is accordingly regulated by Länder laws, and the regulations differ from one Land to another. In general, however, the following features are common to all the Länder:

- Vocational schools are financed from *tax revenue*.
- The costs of the provision, maintenance and management of school buildings and grounds, also of the administrative personnel, are borne by the *providers of the schools*. In the case of vocational schools these are mainly towns forming a single administrative area or rural districts and in some instances the Länder themselves are the providers.
- While the running and maintenance costs of the vocational schools are borne exclusively by the providers, where these are towns forming a single administrative unit (**kreisfreie Städte**) or rural districts (**Landkreise**) they receive, as a rule, fairly substantial *grants from the Land* for the construction of school buildings and the laying out of grounds.
- the costs for teachers at vocational schools are borne by the *Länder*. These include not only the salaries of both civil servants and salaried employees but also the additional personnel expenses such as retirement pensions, grants, costs of further training, etc.

6 Cf. The commission of experts on the costs and financing of vocational training, loc. cit.

7 Cf. p. 190 et seq.

9.2.4 Financing of the various organs concerned with vocational training

The tasks undertaken by the *competent bodies* in connection with initial and further training are financed by the *contributions of members* and *fees* payable by the training firms. Fees are charged for the supervision of a training relationship, examinations and so on. The charging of fees is, however, managed differently by the various competent bodies. A number of those responsible for apprenticeship training in the *crafts* (Craft Chambers) receive grants from Land budgetary funds (within the framework of promotion of medium-sized industry and trade) towards the personnel and other costs of the training advisers they employ. Where the competent bodies are not Chambers but authorities, financing is from *public budgetary funds*.

Costs arising for the *Vocational Training Committees* of the competent bodies are borne by the body concerned, while the *Land Committees for Vocational Training* are financed from the budgetary funds of the Land ministry responsible for their administration. *The Federal Institute for Vocational Training* is financed by the Federal Government and the *Federal Institute of Labour* by employers' and workers' contributions.

10. PROBLEMS AND TRENDS

The past two decades has seen an *unprecedented increase in the demand for education and training* in all areas of the system, in the schools and universities as in the dual system. The main causes were the well-known demographic developments[1] and (in the case of secondary schools and universities) the *expansion of education* which is a feature of educational policy and promoted through appropriate measures. A corresponding expansion of capacity in general and vocational education had therefore to be the prime objective. It proved possible, by and large, to ensure a training place for the vast majority of school-leavers, whether at university or in the dual system. While the combined efforts of the Federal Government and the Länder, with a total expenditure of some DM 138 thousand million[2], resulted in a considerable expansion of tertiary education, industry and commerce responded to the appeals of the Federal and Länder Governments by substantially increasing the number of training places within the dual system, which rose by about 375 000 to approximately 677 000 between 1970 and 1979 whilst the number of trainees, overall, rose from about 1 645 000 in 1979 to approx. 1 831 000 in 1985.

Even so, problems resulted from the application of the policy of *limitation of admission* (**Numerus clausus**), in higher education and the dual system particularly but also in the vocational schools. Where these still exist – among the various branches of study at universities and the various skilled occupations within the dual system – there is a substantial imbalance between supply and demand. In contrast to the few 'hard' limited-admission faculties at the universities (such as medicine, dentistry and biology) we find, for example, a series of technical and natural science disciplines in which the supply of training places exceeds the demand. The situation is similar in the dual system, where a shortage of training places in certain occupations contrasts with a dearth of applicants in others. An additional problem has been created by the fact that the number of training places was also increased for occupations in which prospects of employment and a good career or only moderate or, indeed, slight.

The developments and relationships described here make it apparent that even a relative *harmonization* of the education system on the one hand and the employment system on the other is difficult, can only be approximated, and presents a permanent task for educational and labour market policy.

However, hardly anyone in the Federal Republic of Germany questions the view that, at a time of rapid economic and technological change, rigid *planning* of educational *and* qualification requirements leads to uncertainty and erroneous trends; such a procedure would be based on the premise that the allocation of places in education and training must be oriented to the needs of society (which, incidentally, are always merely presumed). But any introduction of a labour requirement factor into educational and training policy is incompatible with the *basic right to education* as postulated in the Basic Law of the Federal Republic.

A more promising approach to (indirect) better harmonization of the education and employment systems is seen in the improvement of *educational and training counselling*, in *mobility-promoting* vocational training, and further expansion of the *further training system*.

---

1 Cf. p. 12 et seq.

2 Between 1970 and 1980.

Whereas vocational training policy, particularly since the second half of the 1970s, was primarily an effort to solve the *problem of numbers*, the 1980s are more likely to feature *problems of quality* in training. This aspect, however, is subject to differing opinions and evaluations on the part of the employers on the one hand and the workers on the other. This applies to assessment of the degree to which the dual system has proved itself, as it does to the question of which prerequisites and measures are appropriate for bringing about an improvement in the quality of training.

But despite this, it is clear that as regards the importance and fundamental efficiency of the *dual system* as a qualifying potential there is – apart from a few extreme opinions – broad consensus in *vocational training policy* circles.

Initiatives to improve vocational training within the framework of the dual system, demanded and pursued with varying degrees of vigor, can be seen in

- the even stronger pedagogic and didactic character given to training processes on the basis of modern Training Ordinances,
- improved and closer cooperation between the Berufsschule and the training firm,
- optimal use of various learning venues,
- greater pedagogic emphasis in the qualification of trainers and teachers,
- and in the further expansion of educational and training counselling.

The associations and representatives of teachers at vocational schools are demanding firmer legal-institutional integration of the Berufsschule into the dual system and complain about the inferior position of Berufsschule teachers – compared with the social partners – in the vocational training committees and other bodies. They also maintain that the exclusive responsibility of the competent bodies for the final (qualifying) examination for skilled workers amounts to discrimination against the Berufsschule and means, furthermore, that the Berufsschule pupils (who, it will be remembered, are also trainees) have to sit the skilled-worker examination as external students. These are old demands on the part of the Berufsschule teachers which meet with little sympathy, especially in industry and commerce and among the competent bodies; these could refer to the constitutional position (division of Federal Government and Länder competence in vocational training), but also because of the important position the Berufsschulen *actually* occupy, and the extent to which they participate in training and examinations in the dual system, they see no reason to agree to changes, and certainly none for bringing them about themselves.

There are also sharp differences of opinion between the social partners, and indeed between the political parties, on the question of whether the *financing* of on-the-job training by *individual*

firms should be replaced by a *collective system of financing*. In 1974 a commission of experts[3] appointed by the Federal Government submitted the results of an investigation into the costs and financing of out-of-school vocational training and recommended – as a precondition for approximating and raising the quality of training – the financing of in-firm training through a *fund system*. No legislation to this effect resulted at the time, mainly because of opposition from industry and the Free Democratic Party within the Government coalition. Industry and commerce asserted, among other things, that a *vocational training levy* for all firms would prove too great a burden, but quite apart from this they suspect that any collective financing regulation could result in increased administration, bureaucratization and control of on-the-job training, with consequent restriction of their initiative and organizational competence.

In contrast, the trade unions, in particular, viewed – and still view – a collective financing system as a way of achieving better 'steering' of in-firm vocational training, also from the aspects of sectorial and regional imbalance in the availability of training places, increased public responsibility for vocational training in firms too, and approximation and improvement of the quality of training.

The short-lived Training Place Promotion Act of 7 September 1976 was, to a certain extent, an 'interim solution', the primary aim of which was to ensure the provision of enough training places; and discussion of a collective financing system, while it did not flare up, did flicker again in 1980/81.

The occasion was the decision of the Federal Constitutional Court dated 10 December 1980, whereby the Training Place Promotion Act was declared to be incompatible with the Basic Law and therefore null and void. Since this law also included regulations concerning *vocational training planning*, *vocational training statistics*, and the *Federal Institute for Vocational Training* a new bill had to be introduced and a law passed, especially to safeguard the legal position of the Federal Institute. This situation was seen by the trade unions and a small section of the Social Democratic parliamentary party as a good o opportunity to introduce – either in conjunction with the new law, or incorporated in it – a comprehensive collective financing regulation. But the Government did not pursue this in its bill[4], probably because its coalition partner, the Free Democratic Party, firmly maintained its opposition to the proposal. While the trade unions have renewed their efforts, emphasizing their argument about quality, also the expense of training the educationally subnormal, those with learning difficulties and young migrants, the central employers' organizations have reminded all concerned that the employers have never questioned the system of financing by individual firms or demanded 'equalization of burdens'. Nor do they consider raising the quality of training to be primarily a question of costs.

When there is a divergence of opinion regarding the expediency of, and necessity for, a collective financing system and agreement is not likely to be reached in the foreseeable future, it must be realized that under the constitutional and free market economy conditions which obtain in the

---

3 Commission of experts on the costs and financing of vocational training (Sachverständigenkommission Kosten und Finanzierung der beruflichen Bildung), loc. cit.

4 The bill – Entwurf eines Gesetzes für die Berufsbildungsförderung – was introduced on 21.1.1981.
The law – the Vocational Training Promotion Act (Berufsbildungsförderungsgesetz) – came into force on 1.1.1982. Cf. p. 30 et seq.

Federal Republic of Germany vocational training in the firms and the policy governing it is bound up in a network of economic and social interests, in which the exclusiveness of vocational-pedagogic considerations has no place and cannot have a place.

Reference has been made in the relevant sections of this report to the fact that in recent years the vocational training policy of the Federal Government and the Länder, the employers and the trade unions, has focused increasingly on the training of the *educationally subnormal*, those with *learning difficulties*, *girls*, and *young migrants*. It is to be hoped that these efforts, even if they are not increased, will at least be continued with the same intensity, as the social and educational policy makers have become more sensitive to fringe groups and discrimination against them. Meanwhile youth unemployment has also become a serious problem in the Federal Republic of Germany, even though – with the exception of Luxembourg – it is still distinctly lower than in the other EC countries. Those worst hit by unemployment are the young people with no vocational qualification. Among the educationally subnormal, those with learning difficulties, girls and young migrants the number of young persons without vocational training is over-proportionally high. The percentage of trainees among these groups should therefore be increased, and this requires higher expenditure on vocational and social pedagogics – especially for the educationally subnormal and those with learning difficulties.

The relevant *pilot projects* – developed by the Federal Government and the Länder – and their results provide a substantial foundation for developing and widening the necessary training facilities. With the marked reduction in the total number of young people during this decade, there will be keener competition between the dual system and the full-time vocational schools[5]. This could result in further positive developments – to the advantage of the young persons.

A question which has not yet been decided for the whole of the Federal Republic, but which is due to be settled in the near future, is the *extension of the period of compulsory education* to ten years and, consequently, the content of this tenth school year. Here there are differences of opinion between the Länder with socialist-liberal governments (known as the 'A Länder') and those ruled by the Christian Democrats (the 'B Länder') between employers and trade unions, and also between the 'Education and Science' trade union[6] and the Berufsschule teachers' associations. It is fairly safe to assume that the early 1990s will see the introduction of ten-year compulsory education in all the Federal Länder. Discussion – and this also affects vocational training policy in the narrower sense – is centreed around whether this tenth school year should be devoted to *general education* and therefore assigned to the Hauptschule, or whether *vocational training* should be given priority, as in the Basic Vocational Training Year or the vocational preparation year.

The trade unions, including the Education and Science Union, regard a *general-education* tenth school year as an important prerequisite for achieving equality of opportunity and reject the idea of making the BVY or the vocational preparation year the tenth compulsory year at school. In this they are at one with the A Länder and in opposition to the B Länder and the vocational school teachers' associations, who want ten-year compulsory education with preference given to *vocational education*, at least as an option for the pupil. This would accord with the learning

5 In particular the Berufsfachschulen; cf. p. 121 et seq.

6 Gewerkschaft Erziehung und Wissenschaft

motivation and learning behaviour of the young people concerned. In addition – the argument goes on – continuation of general education in the tenth year at school would increase the trend towards 'fleeing from vocational training'. For similar reasons the employers are also opposed to a tenth general-education school year. Moreover, it is feared that the introduction of a tenth compulsory year would see a sharp rise in the number of pupils leaving school without a certificate. The employers therefore advocate various forms of vocational qualification. From their point of view the appropriate place for Hauptschule pupils with leaving certificates in the tenth year is the Basic Vocational Year and the Berufsfachschule, while those without leaving certificates and pupils from special schools should proceed to the vocational preparation year or special forms of the BVY. In the current developments and discussions, all the indications lead to the conclusion that within the foreseeable future, at any rate, a uniform type of tenth school year in all the Federal Länder is not to be expected. The question of further development and expansion of the *Basic Vocational Training Year* is likewise still open.

It has already been mentioned[7] that for some time the balance has been tipping in favour of the BVY in its *cooperative form*. Whereas originally (end of the 1960s) the Basic Vocational *School* year (**Berufsgrund*schul*jahr**) was the only organizational solution under discussion for imparting basic vocational training, both the Federal Government and the Länder now display a certain reticence with regard to the BVY in that form. Some trade unions, too, particularly the Metal Workers' Union, have made a U-turn and now favour the cooperative BVY.

It is also feasible, however, that, as a result of the drop in the number of people attending school and the consequent rise in available material and human resources, a new impulse may be given to the extension of the school-based BVY, in the form of part-time schooling, for certain occupational sectors.

Although the BVY in its school-based form means a saving in costs for the training firms, industry and commerce as a whole (although opinions differ to a certain extent in the crafts) are inclined to be opposed to this form of BVY, or at least to view it with skepticism. In contrast, the vocational school teachers' associations unequivocally give preference to the full-time school-based form.

The reasons for these developments and varying opinions are manifold and cannot be gone into in detail here. Financial considerations – if unspoken – are among the reasons why the Federal Government and the Länder do not view the full-time school-based BVY with any enthusiasm. With resources greatly reduced as a result of the overall economic situation, further expansion of this form of BVY would entail particularly heavy expenditure, whereas in the case of the cooperative BVY a substantial part of the costs (for practical training) is borne by the firms. While industry and commerce see the expansion of the full-time school-based BVY as an undesirable trend towards making vocational training 'school-like' in character, the Berufsschule teachers view it as an opportunity to widen and deepen the theoretical foundation of training, to improve harmonization of theory and practice, to continue general education and increase lateral mobility between the dual system and other vocational schools. The Metal Workers' Union doubts

7 Cf. p. 112 et seq.

whether the occupational choice situation will be improved by the school-based BVY, with the countability problem and the establishment of sub-fields within occupational fields presenting additional difficulties.[8] The positions of the main parties concerned with vocational training policy, which are very briefly described here, are very complex and, in addition, they are overlaid and influenced by class, trade union, economic and public order interests. Nevertheless if, viewed as a whole, they give a positive picture of the realities and prospects of vocational training in the Federal Republic of Germany, then this is also an indication of a great capacity for compromise on the part of all those involved.

8 Cf. p. 110.

INDEX OF TABLES

Table		Page
1	Demographic evolution. Population density	12
2	Resident population in 1985 according to sex	12
3	Pupils at general-education schools according to educational level and type of school	15
4	Pupils at vocational schools according to educational level and type of school	15
5	Foreigners in Germany	16
6	Foreigners according to sex, 1985	16
7	Foreigners according to age group, 1985	17
8	Foreigners according to duration of stay, 1985	17
9	Youth unemployment (under 20 years)	21
10	Youth unemployment (20–25 years)	21
11	Unemployment among graduates	21
12	Proportion of Hauptschule pupils in selected years	24
13	Numbers of trainees, 1965–1980	42
14	Total number of trainees according to training sector	42
15	Trainees in the ten most popular occupations, in order of popularity (1985)	43
16	Trainees in the ten most popular recognized skilled occupations according to order of popularity and sex (female trainees), 1985	44
17	Trainees in the ten most popular recognized skilled occupations according to order of popularity and sex (male trainees), 1985	44
18	Number of in-firm and group training workshops for metal and other occupations in industry KWB survey	70
19	Number of firms shown according to time spent on in-firm instruction (Engineering fitter-machinist)	71

20 Number of firms shown according to time spent on in-firm instruction (Dispensing optician) 71

21 Training places in group workshops/centres 76

22 Quantitative development of recognized skilled occupations, 1977–1986 88

23 Number of pupils in the Basic Vocational Training Year according to form of implementation. School year 1971/72 to 1985/86 113

24 Number of pupils in the Basic Vocational Training Year (school-based and cooperative) in relation to the number of trainees in the first year of training. School year 1978/79 to 1985/86 114

25 Number of pupils at Berufsfachschulen 123

26 Number of pupils at Fachschulen 126

27 Number of pupils at Berufsaufbauschulen 129

28 Number of pupils at Fachoberschulen and Fachgymnasien 132

29 Young people leaving Berufliche Gymnasien with general or faculty-restricted university entrance certificates 133

30 Young foreigners under sixteen years of age 1982–1985 142

31 Trainees and young people without training contracts in the Federal Republic 1962–1978 Berufsschule statistics 146

32 Federal regulation for further vocational training and retraining in accordance with the Vocational Training Act, the Crafts Code, the Seamen's Law and the Federal Officials Law 154

33 Further training regulations of the competent bodies 155

34 Further vocational training 1978 156

35 In-firm induction measures for graduates, accompanying, or in place of, trainee programmes 174

36 Participants in basic training courses 178

37 Participants in promotion courses 179

38 Participants in courses to improve integration prospects 179

39 Vocational preparation measures – Land Employment Office North Rhine-Westphalia 1985/86 181

INDEX OF DIAGRAMS

Diagram		page
1	Projection of 6-, 11-, and 16-year-olds, 1982 to 2000	13
2	Birth figures, 1925 to 1990	14
3	Gainfully active population according to economic sector	18
4	Gainfully active population according to occupational status	18
5	Number of gainfully active persons	19
6	Unemployed persons and unfilled vacancies	20
7	The education system of the Federal Republic of Germany	28
8	The history of vocational training – a survey of important dates	38+39
9	The pedagogic structure of the dual system	41
10	The legal-administrative structure of the dual system	51
11	Time spent by the trainee in one learning venue as a percentage of the total training period Occupation: Engineering fitter-machinist	64
12	Time spent by the trainee in one learning venue as a percentage of the total training period Occupation: Dispensing optician	66
13	Functions of the learning venue training workshop for the occupation of engineering fitter-machinist	69
14	Functions of the learning venue in-firm instruction for the occupation of engineering fitter-machinist	72
15	Functions of the learning venue in-firm instruction for the occupation of dispensing optician	73
16	Training Ordinance for mono-training (without specialization)	89
17	Training Ordinances for mono-training with Schwerpunkte	90
18	Training Ordinances for mono-training with Fachrichtungen	91
19	Training Ordinances for polyvalent training (graduated)	92
20	Procedure for the harmonization of Training Ordinances and outline curricula in accordance with the joint protocol of results dated 30 May 1972	98

21 Berufsschule instruction organized on the block system and on the part-time system 115

22 Plans for graduated training 118

23 Graduated training for occupations in Electrotechnology 119

24 Some variants of the vocational educational path (Second educational path) 136

25 Tasks of the Berufsförderungszentrum Essen e.V. 160

26 Dual-qualification courses – qualification combinations 166

27 Training courses within the framework of the vocational academies 171

28 Training for Abiturienten in cooperation with administrative and commercial academies 172

29 Schematic course of the trainee programme 175

BIBLIOGRAPHY (SELECTION)[1]

Section 1:

Arbeitsgruppe am Max-Planck-Institut für Bildungsforschung: Das Bildungswesen in der Bundesrepublik Deutschland, Reinbek bei Hamburg 1979.

Becker, H. in conversation with H. von Hentig: **Die Zukunft des deutschen Bildungswesens**. In: **Die andere deutsche Frage**. Pub.: W. Scheel, Stuttgart 1981.

Fredebeul, F.-H.: **Berufliche Bildung in der Bundesrepublik Deutschland - Grundinformationen**, Bielefeld 1981.

Bundesminister für Bildung und Wissenschaft (Pub.): (Federal Minister for Education and Science)
Berufsbildungsbericht 1982 (Vocational Training Report)
Berufsbildungsbericht 1983
Berufsbildungsbericht 1984
Berufsbildungsbericht 1985
Berufsbildungsbericht 1986

Bundesminister für Bildung und Wissenschaft (Pub.):
Grund- und Strukturdaten 1980/81, Bonn 1983 (Basic and Structural Data)
Grund- und Strukturdaten 1981/82, Bonn 1984
Grund- und Strukturdaten 1982/83, Bonn 1985
Grund- und Strukturdaten 1983/84, Bonn 1986

Bundesminister für Bildung und Wissenschaft (Pub.):
Studenten an Hochschulen 1975 - 1980.

Bundesanstalt für Arbeit (Federal Institute of Labour) (Pub.):
Arbeitsstatistik 1980 - Jahreszahlen (Labour statistics – annual figures), Nuremberg 1981 (= **Amtliche Nachrichten der Bundesanstalt für Arbeit**).

Koll, H.-J.: **Mobilität und Beruf**, Opladen 1981 (= **Beiträge zur wissenschaftlichen Forschung, 18**).

Müllges, U. (Pub.): **Handbuch der Berufs- und Wirtschaftspädagogik, Band 1 und 2**, Düsseldorf 1979.

Sachverständigenrat zur Begutachtung der gesamtwirtschaftlichen Entwicklung: Herausforderung von aussen. Jahresgutachten 1979/80, Stuttgart 1980.

Stat. Bundesamt Wiesbaden (Federal Statistical Office) (Pub.): **Bildung und Kultur, Fachserie 11, Reihe 1, Allgemeines Schulwesen 1981**, Stuttgart 1983.

1 Cf. p. .207 and 208.

Stat. Bundeamt Wiesbaden (Pub.): **Bildung und Kultur, Fachserie 11, Reihe 3, Berufliche Bildung 1981**, Stuttgart 1982.

Section 2:

Bundesinstitut für Berufsbildungsforschung (Pub.): **Zehn Jahre Berufsbildungsgesetz. Berufsbildung in Wissenschaft und Praxis, Sonderheft**, (1979) December.

Dörschel, A.: **Geschichte der Erziehung im Wandel von Wirtschaft und Gesellschaft**. Pub: A. Dörschel, Berlin 1972 (= **Ausbildung und Fortbildung. 1**).

Hedderich, G.: **5000 Jahre Berufsausbildung. Vom Codex Hammurabi zum neuen Berufsbildungsgesetz**. In: **Wirtschaft und Berufs-Erziehung, (1970) 22**.

Historische Forschung im Bereich der Berufspädagogik. Zeitschrift für Berufs- und Wirtschaftspädagogik, (1980) 8.

Horleben, M.: **Die berufsbegleitenden kaufmännischen Schulen in Deutschland (1800 - 1945), eine Studie zur Genese der kaufmännischen Berufsschule.** Pub: R. Berke, Frankfurt/Main and Bern 1976 (= **Forschung und Praxis beruflicher Bildung. 3**).

Kieslinger, A.: **20 Jahre Berufsausbildung in der Bundesrepublik Deutschland 1945 - 1965**, Bielefeld, no year given.

Münch, J.: **Das Berufsbildungsgesetz in historischer und berufspädagogischer Sicht.** In: **Die Deutsche Berufs- und Fachschule, (1969) 65.**

Stratmann, K. (Pub.): **Quellen und Dokumente zur Geschichte der Berufsbildung in Deutschland**, Cologne and Vienna 1980 et seq.

Thyssen, S.: **Die Berufsschule in Idee und Gestaltung**, Essen 1954.

Section 3:

Abraham, K.: **Berufsbildung, ausserbetriebliche.** In: **Handwörterbuch der Betriebswirtschaft**. Pub: E. Grochla and W. Wittmann, Stuttgart 1974.

Ausserbetriebliche Berufsausbildung. In: **Im Brennpunkt**. Pub: **Gewerkschaft Erziehung und Wissenschaft im DGB**, (1981) February.

BASF-Aktiengesellschaft (Pub.): **BASF-Symposium vom 6. April 1978 in Ludwigshafen**, Cologne 1978.

Behr, M.: **Die Entstehung der industriellen Lehrwerkstatt.** Frankfurt/Main - New York 1981.

Benner, H.: **Der Ausbildungsberuf als berufspädagogisches und bildungsökonomisches Problem**, Berlin 1977 (= **Schriften zur Berufsbildungsforschung. 44**).

Benner, H. and others: **Hilfen zur Umsetzung von Ausbildungsordnungen in die betriebliche Praxis**. Pub: **Bundesinstitut für Berufsbildung**, (Federal Institute for Vocational Training), Berlin 1980 (= **Berichte zur beruflichen Bildung. 22**).

Bundesinstitut für Berufsbildung (Pub.): **Verzeichnis der anerkannten Ausbildungsberufe mit Verzeichnis der zuständigen Stellen**, edition 1986, Bielefeld.

Bunk, G.P.: **Konzepte kaufmännischer Stufenausbildung**. Pub: **Deutscher Verband für kaufmännisches Bildungswesen e.V., Brunswick**: published by the author 1976 (= **Band 36, neue Folge Band 115**).

Deutscher Bildungsrat: Die Bedeutung verschiedener Lernorte in der beruflichen Bildung, Stuttgart 1974.

Eichberg, E.: **Die Lehrwerkstatt im Industriebetrieb**, Weinheim 1965.

Gerds, P. and G. Schwarz: **Bestandsaufnahme der vom Bund geförderten Versuche zum Berufsgrundbildungsjahr**
– **Strukturdaten**
– **Ziele**
– **Schwerpunkte**, Berlin 1976

Glaser P.: J. Höpke, and J.G. Lemke: **Daten zum Entwicklungsverlauf des Berufsgrundbildungsjahres.** Pub: **Bundesinstitut für Berufsbildung**, Berlin 1978 (= **Materialien und Statistische Analysen zur beruflichen Bildung. 7**).

Höhn, E. and others: **Sonderformen der Berufsgrundbildung in Rheinland-Pfalz, Abschlussbericht**, Mainz 1983.

Hopf, B.: **Die Scheinfirma als Bildungseinrichtung des Kaufmanns**. Mainz, University, Diss. 1971.

Höpke, J.: **Rechtliche Grundlagen zum Berufsgrundbildungsjahr – schulisch und kooperativ – in den Ländern.** Pub: **Bundesinstitut für Berufsbildung**, special publication, Berlin 1980.

Industriegewerkschaft Metall (Pub.): **Schulisches Berufsgrundbildungsjahr**. Ziele, Praxis, Konsequenzen. Manuscript, Frankfurt 1980

Kleinschmidt, R.: **Betriebliche und überbetriebliche Ausbildungswerkstätten in der Bundesrepublik Deutschland. Eine Bestandsaufnahme.** Hannover 1974 (= **Schriften zur Berufsbildungsforschung. 24**).

Krumm, V. and others: **Auswirkungen des Blockunterrichts auf Einstellungen von Berufsschülern und Berufsschullehrern**, Düsseldorf, 1974.

Kultusminister des Landes NW (Pub.): **Curriculum. Berufliche Schulen. Blockunterricht in der Berufsschule**, Essen 1973 (= **Schulreform NW Sekundarstufe II**).

Lemke, J.G. and others: **Probleme und Aspekte der Berufsfeldeinteilung.** Pub: **Bundesinstitut für Berufsbildungsforschung**, Berlin 1975 (= **Schriften zur Berufsbildungsforschung. 36**).

Lipsmeier, A.: **Didaktik der Berufsausbildung**, Munich 1978 (= **Studientexte Fernuniversität**).

Lipsmeier, A.: **Organisation und Lernorte der Berufsausbildung**, Munich 1978 (= **Studientexte Fernuniversität**).

Maslankowski, W.: **Ausbildungsordnungen. Eine erste Zwischenbilanz**, In: **Zeitschrift für Berufsbildungsforschung (1974) 2.**

Michelsen, U.A.: **Der Ausbilder in der Industrielehrwerkstatt – Eine historisch-empirische Studie zu Fragen seiner Tätigkeit. Berufseinstellung und Ausbildung**, Trier 1977.

Müller, J., assisted by E. Geyer and G. Winter: **Der Blockunterricht im Urteil von Schülern**, Munich 1980.

Münch, J.: **Die Lehrlingsausbildung in der Bundesrepublik Deutschland.** Pub: Commission of the European Communities, Brussels and Luxembourg 1976 (= **Sozialpolitik. 28**).

Münch, J.: **Lernen – aber wo? Der Lernort als pädagogisches und lernorganisatorisches Problem**, Trier 1977.

Münch, J. and others: **Interdependenz von Lernort-Kombinationen und Output-Qualitäten betrieblicher Berufsausbildung in ausgewählten Berufen**, Berlin 1981.

Münch, J. and others: **Organisationsformen betrieblichen Lernens und ihr Einfluss auf Ausbildungsergebnisse.** Pub: J. Münch, Berlin 1981 (**Ausbildung und Fortbildung. 22**).

Nolte, H. and H.-J. Röhrs (Pub.): **Das Berufsbildungsgesetz**, Bad Heilbronn 1979 (= **Klinkhardts Pädagogische Quellentexte**).

Nowak, H.: **Überbetriebliche berufliche Bildungsstätten. Bestandserhebung 1979/80**, Berlin 1981 (= **Materialien und statistische Analysen zur beruflichen Bildung. 23**).

Schwiedrzik, B.: **Kooperation und Blocksystem.** Pub: **Bundesinstitute für Berufsbildung**, Berlin 1980 (= **Berichte zur beruflichen Bildung. 31**).

Stratmann, K.: **Stufen der Berufsbildung.** In: **Handbuch der Berufs- und Wirtschaftspädagogik, Band 2.** Pub: U. Müllges, Düsseldorf 1979.

Stufenausbildung. Die Deutsche Berufs- und Fachschule, (1970) 4.

Zentrum für pädagogische Berufspraxis an der Universität Oldenburg (Pub.): **Kooperationsveranstaltung: Berufsgrundbildungsjahr, Universität Oldenburg, WS 79/80.**

Section 4:

Arbeitskreis der Direktoren an deutschen Ingenieurschulen (Pub.): **Deutsche Techniker Schulen 1964**, Berlin 1964.

Beinke, L.: **Berufliche Vollzeitschulen in der bildungspolitischen Diskussion.** From **Politik und Zeitgeschichte, (1979) B 48.**

Beiser, H.: **Zweiter Bildungsweg.** Pub: G. Geissler, Weinheim 1960[2] (= **Pädagogische Studien**).

Blättner, F. and J. Münch: **Pädagogik der Berufsschule**, Heidelberg 1965.

Freytag, H.-P.: **Zur Problematik mittlerer Bildungsqualifikationen.** Pub: L.Froese and W. Klafki, Weinheim, Berlin and Basel 1969 (= **Marburger Pädagogische Studien. Neue Folge. 3**).

Georg, W.; G. Gruner and W. Scherer: **Berufsausbildung in metallgewerblichen Vollzeitschulen. Berufsbildung in Wissenschaft und Praxis, (1979) 1.**

Handbuch der Lehranstalten für das Bundesgebiet und Berlin (West), Verlag M. Klug, Munich, seventh edition.

Heid, H.: **Die Berufsaufbauschule. Bildungsideologie und Wirklichkeit**, Freiburg i.Br. 1966.

Kultusminister des Landes NW (Pub.): **Neuordnung des beruflichen Schulwesens NW**, Düsseldorf 1973 (= **Schriftenreihe des Kultusministers. 22**).

Mayntz – Trier (Pub.): **Materialien und Analysen zum Fachschulbereich.** Pub: Deutscher Bildungsrat, Stuttgart 1971 (= **Gutachten und Studien der Bildungskommission. 16**).

Münch, J. and others: **Schulversuche zum Berufsgrundschuljahr in Rheinland-Pfalz II. Abschlussbericht des Beirates zur Begleitung der Schulversuche zum Berufsgrundschuljahr in Rheinland-Pfalz**, Mainz 1976.

Röhrs, H. (Pub.): **Die Berufsschule in der industriellen Gesellschaft**, Frankfurt/Main 1968.

Schannewitzky, G.: **Organisation des beruflichen Schulwesens.** Pub: A. Dörschel, Berlin 1972 (= **Ausbildung und Fortbildung. 3**).

Section 5:

Alt, C. and A.: **Erschliessung gewerblich/technischer Ausbildungsberufe für Mädchen.** Pub.: **Bundesinstitut für Berufsbildung**, Berlin 1980 (= **Modellversuche zur beruflichen Bildung. 6**).

Bach, H. and others: **Berufsbildung behinderter Jugendlicher**, Bonn-Bad Godesberg 1971.

Berufsbildung für Behinderte. Zeitschrift für Berufs- und Wirtschaftspädagogik, (1980) 12.

Bildungswerk der Hessischen Wirtschaft Z.V. (Pub.): **Projekt 'Mädchen in gewerblicher Berufsausbildung'**, Darmstadt 1980.

Bobzien, M. and J. Popp: **Bibliographie zur Berufsvorbereitung und Berufsausbildung lernbeeinträchtigter Jugendlicher**, Berlin 1980 (= **Bibliographien und Dokumentationen zur beruflichen Bildung. 3**).

Bracken, H. v.: **Erziehung und Unterricht behinderter Kinder**, Frankfurt/Main 1980^2.

Bundesminister für Arbeit und Sozialordnung (Federal Minister for Labour and Social Affairs) (Pub.): **Berufsbildungswerke. Einrichtungen zur beruflichen Erstausbildung Behinderter**, Bonn 1978.

Bundesminister für Arbeit und Sozialordnung (Pub.): **Berufsförderungswerke. Einrichtungen zur beruflichen Eingliederung erwachsener Behinderter, Verzeichnis über Leistungen und Beginntermine Stand 1979/80.**

Bundesinstitut für Berufsbildung (Pub.): **Die berufliche Bildung ausländischer Jugendlicher in der Bundesrepublik Deutschland. Beiträge und Ergebnisse der Fachtagung '79 des Bundesinstituts für Berufsbildung**, Berlin 1980 (= **Tagungen und Expertengespräche zur beruflichen Bildung. 3**).

Dietrich, M.: **Die Berufsausbildung lernbehinderter Jugendlicher**, Reinstetten 1978.

Doerfert, H.: **Problemorientiertes und handlungsbezogenes Lernen mit Jugendlichen**, Frankfurt 1981.

Fröhlich, A.: **Die Förderung Schwerstbehinderter**, Lucerne 1981.

Harrison, J.: Community Projects Foundation, London. (Pub.): CEDEFOP, Berlin 1981 (= Vocational preparation of unemployed young people).

Hecker, U. and D. Schmidt-Hackenberg: **Bildungs- und Beschäftigungssituation ausländischer Jugendlicher in der Bundesrepublik Deutschland – Teil 1 Grunddaten der Befragung** -. Pub: **Bundesinstitut für Berufsbildung**, Berlin 1980 (= **Berichte zur beruflichen Bildung. 30**).

Integrationsprobleme ausländischer Jugendlicher. Zeitschrift für Berufs- und Wirtschaftspädagogik, (1981) Beiheft 2.

Kloas, P.-W. and H. Stenger: **Lernbeeinträchtigte Jugendliche zwischen Schule und Beruf**, Berlin 1980 (= **Berichte zur beruflichen Bildung. 24**).

Münch, J. and others: **Bericht der Wissenschaftlichen Kommission Jugendliche ohne Ausbildungsvertrag.** Pub: **Ministerium für Arbeit, Gesundheit und Soziales des Landes NW**, Essen 1979 (hectogr.).

Münch, J. and E. Jung: **Sozialer und materieller Status von Jugendlichen beim Übergang von der Schule zum Beruf in der Bundesrepublik Deutschland.** Pub: CEDEFOP, Berlin 1980.

Schober, K.: **Berufliche Qualifizierung ungelernter Jugendlicher.** In: **Handbuch für die Soziologie der Weiterbildung.** Pub: A. Weymann, Darmstadt 1980.

Statistisches Bundesamt (Pub.): **Zur Situation der Behinderten in der Bundesrepublik Deutschland**, Stuttgart and Mainz 1981.

Tippelt, R.: **Qualifikation und berufliche Sozialisation erwerbstätiger Jugendlicher**, Frankfurt/Main and Bern 1981 (= **Studien zur Erziehungswissenschaft. 16**).

Wiemer, B.: **Erfolg und Versagen in der betrieblichen Berufsausbildung**, Frankfurt/Main 1981.

Section 6:

Fink, E. and E. Sauter: **Stand und aktuelle Probleme der beruflichen Weiterbildung.** Special publication by the **Bundesinstitut für Berufsbildungsforschung**, Berlin 1980.

Gummersbach, A.: **Die Berufliche Umschulung. Berufsausbildung Erwachsener.** Pub: A. Dörschel, Berlin 1976 (= **Ausbildung und Fortbildung. 5**).

Kalusche, B.; R. Neuber assisted by K.-H. Grotehen: **Das Kaufmännische Weiterbildungsangebot 1976/77.** Special publication by the **Bundesinstitut für Berufsbildung**, Berlin 1979.

Kuratorium der deutschen Wirtschaft für Berufsbildung (Pub.): **Grundposition der Wirtschaft zur beruflichen Weiterbildung**, Bonn 1981[2].

Sauter, E. and E. Fink: **Planung, Organisation und Durchführung von Weiterbildung in Bildungswerken der Wirtschaft**, Berlin 1980 (= **Berichte zur beruflichen Bildung. 23**).

Sehling, H.: **Rechtliche Grundlagen der Ausbildung und Fortbildung im ausserschulischen Bereich.** Pub: A. Dörschel, Berlin 1974. (= **Ausbildung und Fortbildung. 4**).

Schmiel, M.: **Berufspädagogik, Teil III, Berufliche Weiterbildung**, Trier 1977.

Section 7:

Bundesinstitut für Berufsbildung (Pub.): **Fernunterricht**, Berlin, 1978[2] (= **Dokumentationen und Informationen zum beruflichen Fernunterricht. 1**).

Bundesinstitut für Berufsbildung (Pub.): **Rechtsgrundlagen des berufsbildenden Fernunterrichts**, Berlin 1979 (= **Dokumentationen und Informationen zum beruflichen Fernunterricht. 2**).

Dembski, M. and others: **Abiturienten im Handwerk**, Cologne 1978.

Emanuel, W.: **Doppeltqualifizierende Bildungsgänge in der gymnasialen Oberstufe. Kaiserslautern, Universität, Soz.wiss., Diss. 1981.**

Grüner, G. and W. Schlaffke: **Doppelqualifikation – Gesellenbrief und Abitur?** Pub: **Institut der deutschen Wirtschaft**, 1980 (= **Beiträge zur Gesellschafts- und Bildungspolitik 60. 12**).

Kultusministerium Rheinland-Pfalz (Pub.): **Modellversuch Fachoberschule Ludwigshafen, ein doppeltqualifizierender Bildungsgang. Abschlussbericht der wissenschaftlichen Begleitung**, Mainz 1981 (= **Schulversuche und Bildungsforschung Berichte und Materialien**).

Kramer, W. and G. von Landsberg: **Abiturientenprogramme und Traineeprogramme in der Wirtschaft.** Pub: J. Münch, Berlin 1981 (= **Ausbildung und Fortbildung. 19**).

Sommer, K.-H.: **Fernunterricht und objektivierte Lehrverfahren**, Pub: A. Dörschel, Berlin 1972 (= **Ausbildung und Fortbildung. 2**).

Zabeck, J.; B. Weibel und W. Müller: **Die Berufsakademie Baden-Württemberg**, Mannheim 1978.

Section 8:

– . –

Section 9:

Edding, F. and others: **Kosten und Finanzierung der ausserschulischen beruflichen Bildung. Abschlussbericht der von der Bundesregierung berufenen Kommission**, Bielefeld 1974.

Falk, R.: **Kosten der betrieblichen Aus- und Weiterbildung.** In: **Berichte zur Bildungspolitik 1982/83 des Instituts der Deutschen Wirtschaft**, Cologne 1982.

Industriegewerkschaft Metall (Pub.): **Finanzierung der beruflichen Bildung**, Frankfurt/Main 1983 (= **Schriftenreihe der IG-Metall. 98**).

Noll, I. and others: **Nettokosten der betrieblichen Berufsausbildung**, Berlin and Bonn 1983 (= **Schriften zur Berufsbildungsforschung. 63**).

Section 10:

Bundesinstitut für Berufsbildungsforschung (Pub.): **Berufsbildung in den achtziger Jahren. Berufsbildung in Wissenschaft und Praxis, Sonderheft**, (1980) December.

Dauenhauer, E.: **Berufsbildungspolitik**, Berlin and Heidelberg 1981.

Faulstich, P. (Pub.): **Die Bildungspolitik des Deutschen Gewerkschaftsbundes 1949 – 1979**, Stuttgart 1980.

Industriegewerkschaft Metall: Abteilung Berufsbildung (Pub.): **Reform der beruflichen Bildung. Zwischenbilanz und Dokumentation**, Frankfurt 1976.

Kuratorium der deutschen Wirtschaft für Berufsbildung (Pub.): **Zur Zukunft der beruflichen Bildung. Grundaussagen der Wirtschaft**, Bonn 1981.

Lipsmeier, A.: **Berufsbildungspolitik in den 80er Jahren**, Wiesbaden 1983 (= **Beihefte der Zeitschrift für Berufs- und Wirtschaftspädagogik. 4**).

Münch, J.: **Politik und Reform der beruflichen Bildung.** In: **Handbuch für Berufs- und Wirtschaftspädagogik.** Pub: U. Müllges, Düsseldorf 1979.

Münch, J.: **Berufsbildung und Berufsbildungsreform in der Bundesrepublik Deutschland**, Bielefeld 1971.

Schlaffke, W. and R. Zedler: **Die Zukunft der Berufsbildung**, Cologne 1977.

Weiblen, M.: **Staatliche Ausbildungspolitik**, Frankfurt/Main, Bern and Las Vegas 1981 (= **Forschung und Praxis beruflicher Bildung. 8**).

Supplementary Bibliography

Brenner, Hermann: **Ordnung der staatlich anerkannten Ausbildungsberufe**. Pub: **Bundesinstitut für Berufsbildung**, Berlin 1962 (= **Berichte zur beruflichen Bildung 24**)

Bundesminister für Bildung und Wissenschaft (Pub.): **Bildung an der Schwelle zur Informationsgesellschaft**, Bonn 1986 (= Series: **Grundlagen und Perspektiven für Bildung und Wissenschaft 13**)

Deutscher Gewerkschaftsbund, Bundesvorstand (Pub.): **Bildung für alle - fördern statt auslesen. Bessere Bildung durch Mitbestimmung**, Conference report, Düsseldorf 1984.

Ehmann, Christoph: **Fernunterricht**. Cologne 1987. (= **Beiträge zur Gesellschafts- und Bildungspolitik 124**).

Georg, Walter (Pub.): **Schule und Berufsausbildung**, Bielefeld 1984.

Heid, Helmut und Wolfgang Klafki: **Arbeit - Bildung - Arbeitslosigkeit. 19.** Supplement to the journal **Pädagogik**, Weinheim and Basel 1985.

Institut der deutschen Wirtschaft (Pub.): **Berufsausbildung für das Jahr 2000, eine Bilanz der Neuordnung der industriellen Metall- und Elektroberufe**, Cologne 1987 (= **Beiträge zur Gesellschafts- und Bildungspolitik 123**)

Münch, Joachim: **Berufliche Qualifikation und soziale Kompetenz.** In: Jürgen Günther (Pub: **Quo vadis Industriegesellschaft?** Heidelberg 1984.

Münch, Joachim: **"Freiwillige Selbstfortbildung" - ein neuer Ansatz betrieblicher Bildungsarbeit?** In: Walter Georg (Pub.): **Schule und Berufsausbildung**, Bielefeld 1984.

Nuissl, Ekkehard und Hannelore Sutter: **Teilnahme am Bildungsurlaub**, Heidelberg 1984. (= **Berichte der Arbeitsgruppe für empirische Bildungsforschung Heidelberg 18**).

Schlaffke, Winfried und Helmut Winter (Pub.): **Perspektiven betrieblicher Bildungsarbeit**, Cologne 1985

Schlaffke, Winfried und Reinhard Zedler (Pub.): Betriebliche Bildungsarbeit; **Modelle, Standpunkte, Entwicklungen**, Cologne 1982.

Schmiel, Martin und Karl-Heinz Sommer: **Lehrbuch Berufs- und Wirtschaftspädagogik**, Munich 1985.

Wittwer, Wolfgang and others: **Ausbildung im Betrieb, neue Lernsituationen für die Praxis**, Sindelfingen 1985.

Ziefuß, Horst: **Jugendliche in der gewerblich-technischen Ausbildung in Industrie und Handwerk**, Kiel 1987.

LIST OF TERMS

Abitur
(University entrance examination)

State examination (after thirteen years, full time, at school) which confers the right to study at an academic university (**allgemeine Hochschulreife**).

Arbeitsverwaltung
(Labour authorities)

Authorities at Federal and Land level with local employment offices. Tasks: observation and research of the labour market, placement, vocational guidance and the promotion of vocational training (cf. p. 59 et seq.).

Ausbildungsberuf
(Skilled occupation)

An occupation covered by a regulated Training Ordinance and state-recognized in accordance with the Vocational Training Act.

Erzieher

A person who has undergone training at a **Fachschule** for a period of two years and is qualified to care for, and give some tuition to, both normal and handicapped children in a kindergarten, day nursery, all-day school, holiday camp, local authority children's home or an orphanage, also in establishments for handicapped children.

Erziehungswissenschaftliche Hochschule

Developed from the **Pädagogische Hochschule**, this is a special academic university with a rectorate constitution and the right to confer doctorates; pedagogic research is conducted and teachers are trained for the **Grundschule** and the **Hauptschule**, and the academic qualification of **Diplom-Pädagoge** can be acquired.

Fachhochschulreife

Certificate conferring the right to study at a specialized college with university status (**Fachhochschule**), acquired through an examination taken after twelve years, full time, at school.

Fachschulreife

Mittlerer Bildungsabschluss (see p. 280) acquired at a secondary vocational school (**Berufsaufbauschule**).

Gesamthochschule
(Integrated university)

Organizational and didactic combination of an academic university with specialized colleges (**Fachhochschulen**) for research and tuition, providing short, long and advanced courses of study.

Gesamtschule (Comprehensive school)	Organizational and didactic combination of **Hauptschule**, **Realschule** and **Gymnasium** having a course system instead of the class system.
Gymnasium (Grammar school)	General-education school to which a pupil can proceed after four (or six) years at primary school (**Grundschule**) and where he can acquire the general university entrance certificate (**allgemeine Hochschulreife**) after nine (or seven) years.
Hauptschule	Lowest level of general-education secondary school, to which a pupil can proceed after four (or six) years at primary school and where he remains for five (or three) or six (or four) years but cannot, as a rule, acquire the **Mittlerer Bildungsabschluss** (see below).
Hauptschulabschluss (Hauptschule leaving certificate)	Certificate of successful completion of compulsory general education.
Hochschulreife **- allgemeine** (General university entrance certificate)	Proof of entitlement to study at an academic university.
Hochschulreife **- fachgebundene**	University entrance certificate restricted to a specific faculty.
Kolleg	An institute at which young adults who have completed vocational training, and hold the **Mittlerer Bildungsabschluss**, can take a two-and-a-half-year course to acquire the university entrance certificate.
Mittlerer Bildungsabschluss or Mittlere Reife	Certificate of successful completion of the tenth class at a **Gymnasium** or a **Realschule**, very rarely also at a **Hauptschule**: it can also be acquired at **Berufsaufbauschulen** and certain **Berufsfachschulen**.
Pädagogische Hochschule	An institution below university level which trains teachers for the **Grundschule** and the **Hauptschule**.
Realschule	An optional secondary general-education school which prepares pupils for the **Mittlerer Bildungsabschluss**.

Technische Universität

A university which developed from the **Technische Hochschule (Spezialhochschule für Technik)** as a result of adding courses in economics, the social sciences, the humanities, etc., where the emphasis is on teaching and research in the natural sciences and engineering.

Waldorfschule

A primary and secondary private school where tuition is in accordance with the anthroposophic principles laid down by Rudolf Steiner, with considerable emphasis on artistic-emotional and psychomotor areas.

Weimarer Republik

The Weimar Republic was the first democratic German state, during the period between the end of World war I and the seizure of power by the National Socialists.

Zweiter (beruflicher) Bildungsweg
(Second [vocational] educational path)

A blanket term for courses of education for acquiring the university entrance certificate within the framework of vocational secondary schools and/or special institutions such as **Kollegs**; students hold either the **Hauptschulabschluss** or the **Mittlerer Bildungsabschluss** and have completed vocational training or had equivalent occupational experience.

DOCUMENTATION

1. Designations of vocational schools (extract)
2. Annex A of the Act to Regulate the Craft Trades (Crafts Code)
3. Annex B of the Act to Regulate the Craft Trades (Crafts Code)
4. Works Constitution Act (extract)
5. **Berufsschule** tables of time devoted to subjects (selected)
6. Recommendations concerning the content and chronological organization of vocational training
7. Recommendation for the maintenance of report books
8. Notification of the joint protocol of results

No. 1

DESIGNATIONS OF VOCATIONAL SCHOOLS (1)

– Decision of the Standing Conference of the Ministers of Culture dated 8 December 1975 -

(Federal Gazette No.52 of 16 March 1976)

The Standing Conference of the Ministers of Culture agrees that the following designations shall be used for vocational schools:

Berufsschule

Berufsfachschule

Berufsaufbauschule

Fachoberschule

Fachschule

1. **Berufsschulen** are schools attended by those required or entitled to do so, who are undergoing initial vocational training or in an employment relationship. Their task is to impart to the pupil general and specialized learning contents, having special regard to the requirements of vocational training. Instruction is part-time, given on one or more days each week or in the form of block instruction; it is closely related to training in firms, including group training workshops. Where training is divided into basic and skill stages, the basic stage can be in the form of the Basic Vocational Training Year with one year's full-time instruction or the cooperative BVY within the dual system

2. **Berufsfachschulen** are schools which provide full-time instruction lasting at least one year and which do not demand vocational training or occupational experience as a prerequisite for admission. Their task is to provide general and specialized learning contents and enable the pupil to acquire a qualifying certificate in a recognized skilled occupation, or a part of vocational training in one or more such occupations, or a vocational qualification which can be gained only at school.

3. **Berufsaufbauschulen** are schools which are attended – in addition to a Berufsschule, or following completion of compulsory attendance at a Berufsschule – by young persons who are undergoing, or have completed, vocational training. They provide general and specialized theoretical instruction which extends beyond the objectives of the Berufsschule and the course culminates in the *Fachschulreife*, which is equivalent to the intermediate school certificate gained at a Realschule. The course lasts at least one year full time and correspondingly longer part time.

4. **Fachoberschulen** are schools which – building upon the basis of a Realschule leaving certificate or an equivalent qualification – impart general and specialized theoretical and

practical knowledge and skills, and enable pupils to acquire the entrance certificate for a specialized college with university status (**Fachhochschulreife**)[1].

General instruction and specialized practical training are given in the eleventh class and attendance at this class can be replaced by appropriate vocational training.

In the twelfth class instruction is usually full-time; if given part-time it lasts at least two years.

5. **Fachschulen** are schools which basically demand completion of an appropriate course of vocational training or corresponding practical experience as a condition of admission; practical experience in the occupation for which training has been given is usually another prerequisite.

   They provide more extensive skill training and promote general education. Courses at full-time Fachschulen normally last at least one year, while at the part-time Fachschulen they are correspondingly longer.

1 In the Rhineland Palatinate the Fachhochschulreife can be gained only in conjunction with completed vocational training.

No. 2

ANNEX A

OF THE ACT TO REGULATE THE CRAFT TRADES (CRAFTS CODE)

Index of the trades which can be practised as crafts

(Article 1, para. 2)

No.

I. Construction and finishing trades

1. Masons/Bricklayers
2. Concreters & Reinforcement concreters
3. Furnace and chimney builders
4. Baking oven builders
5. Carpenters
6. Roof slaters and tilers
7. Road builders
8. Insulators (boilers, pipes, sound)
9. Floor and wall tilers
10. Precast concrete, cast stone & terrazzo workers
11. Composition floor layers
12. Well sinkers
13. Stonemasons & Stone carvers
14. Plasterers
15. Painters & decorators
16. Tiled stove & hot-air heating installers
17. Chimney sweeps

II. Metal trades

18. Smiths
19. Fitters – sheet metal work
20. Coachbuilders
21. Engineering fittermachinists
22. Toolmakers
23. Turners
24. Mechanics (sewing machine, bicycle & refrigeration)
25. Mechanics, office machinery
26. Motor-vehicle mechanics
27. Motor-vehicle electricians
28. Mechanics, agricultural machinery
29. Precision mechanics
30. Fitter-assemblers (small arms)
31. Plumbers
32. Plumbers (construction)
33. Heating & ventilation fitters
34. Coppersmiths
35. Electricians (installation & maintenance)
36. Electrician fitters (general)
37. Fitters (telecommunications)
38. Electrical fitters (motors, generators, transformers)
39. Service mechanics (domestic radio & television receivers)
40. Watchmakers
41. Metal engravers
42. Chasers
43. Electroplaters (hand) & Grinders (metal)
44. Girdlers & Metal spinners
45. Tinsmiths
46. Metal formers & Metal founders
47. Bell founders
48. Cutlers
49. Goldsmiths
50. Silversmiths
51. Gold, silver & aluminium beaters

III. Wood trades

52. Joiners
53. Floor layers (parquet)
54. Roll shutter & blind fitters
55. Boat builders
56. Shipbuilders
57. Model makers

58. Wagon makers
59. Turners (ivory carvers)
60. Umbrella makers
61. Wood carvers
62. Coopers
63. Brush makers
64. Basket makers

IV. Clothing, textile & leather trades

65 Gentlemen's tailors
66 Ladies' tailors
67 Underwear cutters
68 Embroidery machinists
69 Knitters
70 Milliners
71 Weavers
72 Ropemakers
73 Sailmakers
74 Furriers
75 Hat & cap makers
76 Glove makers-up
77 Shoemakers
78 Orthopaedic shoemakers
79 Tanners
80 Saddlers & Harness makers
81 Pursemakers
82 Interior decorators harmonium builders

V. Food trades

83 Bread bakers
84 Flour confectioners
85 Butchers
86 Millers
87 Brewers
88 Cellermen-rackers (wine)

VI. Health care, bodily hygiene & beauty care, also chemical & cleaning trades

89 Dispensing opticians
90 Hearing aid acousticians
91 Truss makers
92 Orthopaedic appliance makers
93 Surgical technicians
94 Dental/orthodontic technicians
95 Hairdressers
96 Dry cleaners & Dyers
97 Wax chandlers
98 Garment washers & Pressers
99 Cleaners (buildings)

VII. Glass, paper, ceramics and other trades

100 Glaziers
101 Glass cutters & Glass etchers
102 Precision opticians
103 Glass bench workers
104 Glass & porcelain makers
105 Inkstone grinders, Agate grinders and Gem engravers
106 Photographers (still camera)
107 Bookbinders
108 Book printers: Compositors, Printers
109 Lithograhers
110 Screen printers
111 Flexographers
112 Process engravers
113 Stereotypers
114 Electrotypers
115 Ceramicists
116 Organ & harmonium builders
117 Piano & harpsichord makers
118 Accordion & concertina makers
119 Violin makers
120 Brass and percussion instrument makers
121 Woodwind instrument makers
122 Plucked (string) instrument makers
123 Gilders
124 Sign (including neon) makers
125 Electro-platers

No. 3

ANNEX B

OF THE ACT TO REGULATE THE CRAFT TRADES (CRAFTS CODE)

Index of the trades which are regarded similar to the crafts

(Article 18, para. 2)

No.

I. Construction and finishing trades

1 Scaffolders (erection & hiring of wooden, steel & light-metal scaffolding
2 Structural drying
3 Floor layers (linoleum, plastics, rubber)
4 Rakers (asphalt, bitumen, tar paving, but not road construction)
5 Pointers (construction)
6 Preservation of wood & buildings (wall preservation, wood impregnation in buildings)
7 Pile-driving (driving in piles in hydraulic construction)

II. Metal trades

8 Production to specification of wire frames for decorative purposes
9 Tool grinders & Metal polishers
10 Metal-cutting saw sharpeners
11 Tank preservation (protection against corrosion of oil tanks for firing installations without chemical processes)

III. Wood trades

12 Wooden clog makers
13 Blockmakers
14 Stave hewers
15 Wooden ladder makers (to specification)
16 Trough makers
17 Wheelwrights
18 Wooden shingle makers

No.

IV. Clothing, textile and leather trades

19 Pressing shops, men's outer garments
20 Decoration seamstresses (not shop window decoration)
21 Rug maker (`rag' type)
22 Bobbin-lace maker
23 Theatrical costume machinists
24 Pleaters
25 Passementerie makers
26 Cloth painters
27 Hand knitting machine operators
28 Manual textile printers
29 Invisible menders
30 Jobbing tailors

V. Food trades

31 Offal butchers
32 Ice cream producers (incl. sale of ice cream & related products)

VI. Health care, bodily hygiene & beauty care, also chemical and cleaning trades

33 Starchers (fabric), Steam pressers
34 Express dry cleaners
35 Carpet cleaners
36 Beverage pipe cleaners
37 Beauticians, hairdresser, manicurists & related workers

VII. Other trades

38 Undertakers
39 Lampshade makers (to specification)
40 Piano tuners

No. 4

WORKS CONSTITUTION ACT (EXTRACT)

Article 70

General tasks

(1) The youth delegation has the following general tasks:

1. to apply to the works council for the introduction of measures which would serve the interests of young employees, especially in vocational training matters;

2. to ensure that the laws, ordinances, safety regulations, collective wage agreements and works agreements which benefit young employees are implemented;

3. to receive suggestions from young employees, particularly those relating to vocational training and, if they appear to be well-founded, to ensure that they are dealt with by the works council. The youth delegation has to keep the young employees concerned informed about the state of the negotiations and their final outcome.

(2) In order that the youth delegation may carry out its tasks the works council must keep it informed, fully and in good time. The youth delegation can require the works council to make available any document it may need to discharge its duties.

Article 96
Promotion of vocational training

(1) The employer and the works council are to promote the vocational training of the employees within the framework of the manpower planning for the establishment and in collaboration with the bodies competent for vocational training and the promotion of vocational training. At the request of the works council the employer shall consult it on matters relating to the training of the employees.

(2) The employer and the works council must ensure that employees are given an opportunity to participate in vocational training measures inside or outside the establishment, having regard to the operational requirements of the undertaking. In so doing they must also give due consideration to the interests of older workers.

Article 97
Vocational training facilities and measures

The employer shall consult the works council regarding the establishment and equipment of in-firm facilities for vocational training, the introduction of in-firm vocational training measures and participation in external training measures.

Article 98
Implementation of in-firm training measures

(1) The works council shall participate in decisions relating to the implementation of in-firm vocational training measures.

(2) The works council can oppose the appointment, or request the removal, of a person charged with carrying out in-firm training if that person lacks the necessary personal or technical qualifications, in particular the pedagogical aptitude for giving training in the occupation and processes concerned within the meaning of the Vocational Training Act, or if he neglects his duties.

(3) If the employer provides in-firm vocational training or releases employees to participate in external vocational training measures, or if he defrays all or part of the cost arising from such participation, the works council can propose employees or groups of employees of the establishment for participation in these vocational training measures.

(4) If no agreement is reached in the case covered by para.1 or concerning the nominees proposed by the works council under para. 3, the matter shall be decided by the conciliation committee. The award of the conciliation committee shall take the place of an agreement between the employer and the works council.

(5) If no agreement is reached in the case covered by para.2, the works council can apply to the Labour Court for an order enjoining the employer to refrain from appointing the person concerned or to relieve him of his post. If the employer proceeds with the appointment in violation of a legally binding court order, the Labour Court shall, on the request of the works council, sentence him, after giving prior warning, to pay a fine on account of the appointment, the maximum fine not to exceed DM 20 000. If, in violation of a legally binding court order, the employer does not dismiss the person concerned, the court- *** shall, on application by the works council, compel the employer to comply with the order by the imposition of fines; the maximum fine shall be DM 500 for each day on which the violation continues. The provisions of the Vocational Training Act relating to the organization of vocational training remain unaffected.

(6) Paras. 1 to 5 shall apply, **mutatles mutandis**, where the employer carries out other training measures in the establishment.

222

No. 5

Hours (per week) devoted to subjects in the **Berufsschule** (selected)

Table for trainee administrative employees (Free and Hanseatic City of Hamburg)[1]

Part-time instruction, 1st – 3rd year of training

Subjects	Hours per week
Economics	2
Administration	3
Accountancy	1
Jurisprudence	1
German	1
Politics	2
Sport	1
Electoral duty	1
	12

Table for electrotechnology occupations (Occupational field: Electrotechnology)

The Rhineland Palatinate)[2]

Part-time instruction, basic stage[3]

Subjects	Hours per week
German (G)[4]	1
Social studies (K)[5]	1
Economics(G)	1
Sport (G)	1
Technical instruction (K)	4
Technical calculation (K)	2
Technical drawing (K)	2
	12

1 Table of the Free and Hanseatic City of Hamburg, announced to the schools on 1.2.1981, published by the authority for schools and vocational training, the Office for Schools (Amt für Schule).

2 From: Official Gazette of the Ministry of Culture of the Rhineland Palatinate, No. 5/1980 (Kulturministerium von Rheinland-Pfalz).

3 Corresponds to the first year of training.

4 (G) = basic subject

5 (K) = main subject

Table for trainees in the construction industry (Occupational field: Building technology)

(The Rhineland Palatinate)[6]

Part-time instruction, stage 2[7]

Subjects	Hours per week	
German (G)[8]	1	(1)
Social studies (K)[9] Economics (G)	1	(1)
Religion (G)	1	(1)
Sport (G)	1	(–)
Technical instruction (K)	2	(3)
Technical calculation (K)	2	
Technical drawing or another subject (K)	2	(2)
	10	(8)

6 From: Official Gazette of the Ministry of Culture of the Rhineland Palatinate, No. 5/1980 (Kulturministerium von Rheinland-Pfalz).

7 Corresponds to the third year of training.

8 (G) = basic subject.

9 (K) = main subject.

Table for Berufsschule pupils being trained in Home Economics, Nursing, or Socio-pedagogics, but having no training contract

(Baden-Württemberg)[10]

Pupils with **Hauptschule** training

Part-time instruction, stage 1[11]

Subjects	Hours per week
Religion	1
Sport	1
German	1
Social studies	1
Technical calculation	1
Domestic technology	1
Educational method	1
Textile work	3[12]
	10

10 From: Ministry of Culture and Sport of Baden-Württenberg (**Ministerium für Kultur und Sport**): Annex to Directive V 3131/50 of 10 July 1980.

11 Corresponds to the second year at a Berufsschule.

12 According to the pupil's choice.

No. 6

RECOMMENDATION FOR THE TECHNICAL AND CHRONOLOGICAL STRUCTURE OF VOCATIONAL TRAINING

– decided at the meeting held on 28-29 March 1972[13] –

(**Bundesarbeitsblatt 5/1972,** pp. 338-347)

The Federal Committee for Vocational Training which, pursuant to Article 51, para. 2, No. 3 of the Vocational Training Act, is required to develop proposals for the regulation, expansion and promotion of vocational training, has decided upon the following basic principles for the technical and chronological structure of vocational training. It expects these principles to be observed in the drawing up of vocational training contracts.

I. Preliminary notes

Pursuant to Article 4 of the Vocational Training Act, the text of the vocational training contract must contain details of the technical and chronological structure (training plan); these are an integral part of the vocational training contract and are to accompany it in the form of an annex.

Vocational training contracts which lack this information do not accord with the requirements of the Vocational Training Act and may not be entered in the register of apprenticeships.

Under Article 25 of the Vocational Training Act, or Article 25 of the Crafts Code, the person ultimately responsible for training must, on the basis of the outline training plan, draw up a training plan adapted to the conditions in the firm and to the individual which shows both the technical structure and chronological order of training. Where a Training Ordinance under Art 25 VTA/Art.25 Crafts Code exists, the content of the outline training plan can be taken as the basis for a training plan where this meets the requirements of the individual case. Where a Training Ordinance under Art. 25 VTA/Art. 25 Crafts Code does not yet exist, the occupation descriptions, vocational training plans (Art.109 VTA), technical regulations (Art. 122 Crafts Codes etc., will continue to apply and shall form the basis.

The technical and chronological structure shall be summarized as far as possible, in that the appropriate periods of time shall be assigned to the specialized fields.

II. Criteria

In the preparation of the technical and chronological structure by the training establishment and subsequent examination by the competent bodies, the following requirements must be observed:

---

13 By the Federal Committee for Vocational Training, whose tasks have been taken over by the Central Committee of the Federal Institute for Vocational Training since that Institute came into being.

1. Technical structure

1.1 The technical structure must include all the skills and knowledge specified in the outline training plan or in the occupation description, vocational training plan and technical regulations, which shall continue to apply.

1.2 In the case of regulatory instruments which contain no vocational training plans but only occupation descriptions, the individual contents of training must be described in greater detail.

1.3 The content of the probationary period is to be so designed that it fulfills its purpose and conclusions can be reached regarding the aptitude and inclination of the trainee.

1.4 Skills and knowledge should be combined and structured in such a way that training units are formed which can be assigned to particular functions (sale, accounting, assembly) or certain departments of the training establishment (e.g. bookkeeping, training workshop, model building).

1.5 The training units should not be unwieldy. In the case of larger, related sections of training, technically justifiable sub-sections are to be formed – as far as this is necessary.

1.6 The technical structure must be directed towards the requirements of the intermediate and final examinations.

1.7 Where individual training units take the form of courses, or measures outside the training establishment, they must be so arranged that in-firm and external measures are purposefully coordinated and build one upon the other.

1.8 Overall, also within each training unit, the technical structuring of training should have regard to the basic principle that the special application and consolidation of the skills and knowledge imparted shall take place only after the broadest possible basic training.

2. Chronological structure

2.1 Where the Training Ordinance specifically lays down a chronological sequence, this must be adhered to (e.g. in the first two months, the first six months, the first year of training).

2.2 The chronological order must be related to the sequence of the examinations.

2.3 Technically logical and pedagogic considerations must determine the chronological structure

2.4 Where time norms are given for imparting knowledge and skills, a flexible regulation can be arrived at within this framework which takes into account conditions in the individual firm.

2.5 Each time unit shall make provision for wieldy training phases which correspond to the training content and take annual leave into account; such phases should not exceed six months.

Where possible, and dictated by the skilled occupation and year of training, subsections are to be given in months or weeks.

2.6 The chronological structure shall be directed towards a training sequence within the framework of the training period specified in the training contract.

The duration of the training phases and their chronological sequence can be varied according to the capability of the trainee and the particularities of the training establishment as long as the partial and overall objectives of training are not affected.

In cases of exceptional performance the individual training phases shall be shortened; where there are particular weaknesses they can, having regard to the contractual training period, be extended.

2.7 Deferments and chronological changes are possible within the training phases if they are undertaken in accordance with the above principles.

3. In exceptional, well-founded cases the structure can be deviated from to a limited extent provided the partial and overall objectives are not affected. The training establishment shall give reasons for the deviation and notify the competent body accordingly.

III. Training places and means of training

Training places and means of training are to be specified in the technical and chronological structure.

No. 7

RECOMMENDATION FOR THE MAINTENANCE OF REPORT BOOKS IN THE FORM OF EVIDENCE OF TRAINING

– decided at the meeting held on 24 August 1971[14] –

(**Bundesarbeitsblatt 10/1971**, pp. 631-643)

1. The trainee shall no longer be required to maintain report books within the framework of vocational training in the form demanded hitherto.

2. It must be ensured that, in future, evidence of the chronological and technical progress of training shall be made available to all concerned – trainees, training establishment, Berufsschule and the legal representatives of the trainees – in the simplest form possible (concise information, where appropriate in loose leaf form) (evidence of training).

3. Training Ordinances, or the regulatory instruments which remain applicable under Article 108 of the Vocational Training Act, shall form the basis for the evidence of training. The evidence of training shall serve to systematize vocational training.

4. The trainee must maintain the evidence of training in accordance with the appended example and explanatory notes.

5. The trainee shall complete the evidence of training at least once a week. The employer or trainer must examine and sign the evidence of training at least once a month in accordance with Article 20, para. 4 of the VTA/Article 21, para. 4 of the Crafts Code. He must also ensure that the trainee's legal representative and the Berufsschule are notified of the evidence of training at appropriate intervals and can confirm this by signature.

6. The trainee shall maintain evidence of training throughout the training period.

7. Submission of the evidence of training is a condition of admission under Article 39, para. 1, item 2 of the VTA and Article 36, para. 1, item 2 of the Crafts Code. An assessment in the final examination is inadmissible.

8. The competent bodies shall make decisions which take this recommendation into account, whereby existing regulations will be rendered null and void.

14 From the Federal Committee for Vocational Training.

No. 8

NOTIFICATION OF THE JOINT PROTOCOL OF RESULTS CONCERNING THE PROCEDURE FOR HARMONIZATION OF TRAINING ORDINANCES AND OUTLINE CURRICULA IN VOCATIONAL TRAINING BY THE FEDERAL GOVERNMENT AND THE MINISTERS (SENATORS) OF CULTURE OF THE LANDER

of 6 November 1972

(**Bundesanzeiger** No. 216, p. 2)

The Federal Minister of Labour and Social Affairs announces:

I

Joint protocol of results

concerning the procedure for harmonization of Training Ordinances and outline curricula in vocational training by the Federal Government and the Ministers (Senators) of Culture of the Länder

dated 30 May 1972

Vocational training demands, in addition to cooperation between the participants, harmonization of the Training Ordinances of the Federal Government and the outline curricula of the Länder. In order to achieve such harmonization, and better coordination of in-firm and school-based vocational training, representatives of the Federal Ministers of Labour and Social Affairs, Economics and Finance, and Education and Science and the Ministers (Senators) of Culture of the Länder have agreed upon the following procedure:

1. For coordination purposes, representatives of the Federal Ministers of Labour and Social Affairs, Economics and Finance, and Education and Science, also the Minister responsible for a Particular Training Ordinance, shall meet with one representative of the Ministers (Senators) of Culture of each Land, forming a Coordinating Committee.

   The Coordinating Committee has the following tasks: To agree on basic principles for the harmonization of Training Ordinances and outline curricula,

   to arrange which Training Ordinances and outline curricula should be prepared for a process of reorganization and what committees (of experts) are required for this,

   to ensure, in the course of the harmonization procedure, the necessary retroaction to the responsible bodies,

   to undertake a final harmonization of the Training Ordinances and outline curricula before they are submitted to the responsible bodies with a recommendation for promulgation.

2. In order to ensure the necessary harmonization when drafts of Training Ordinances and outline curricula are being prepared, experts appointed by the Federal Government and the Länder shall meet in joint sessions, at which the results of research conducted by the Fed eral Institute for Vocational Training shall form the basis of discussion. The Ministers (Senators) of Culture of the Lander shall send to the joint sessions experts from the outline curricula committees jointly established by them. The Federal Government can make use of the services of the experts of the Federal Institute for Vocational Training.

   When, in the course of the drafting procedure, Federal Government and Länder experts meet separately, a representative member of the other side can attend the meetings in an advisory capacity.

3. Contact discussions between representatives of the Federal Government and the Ministers (Senators) of Culture of the Länder shall continue in their existing form; they shall take place when agreement cannot be reached in the Coordinating Committee. The representatives shall also meet when general or basic questions affecting coordination of in-firm and school-based vocational training are to be discussed.

   It is agreed that the projected harmonization procedure does not affect legal competencies.

   The procedure for preparing new drafts shall be in accordance with this agreement, as soon as the responsible bodies on both sides have approved it. Current projects shall – where this does not entail substantial delay – be harmonized in the Coordinating Committee.

Representatives of the **Kulturministerkonferenz (KMK)** (Standing Conference of the Ministers of Culture) subject to the approval of the **KMK**

Dr. Haas (**Staatsrat**)

Mr. Piazolo (**Ministerialdirigent**)

Representatives of the Federal Government subject to the approval of the Federal Cabinet

Dr. Haase (**Ministerialdirigent, BMA**)

Mr. Goebels (**Ministerialdirigent, BMWF**)

II

The Federal Government has approved the Joint Protocol of Results of 30 May 1972 with the decision of 1 August 1972.

The Ministers of Culture of the Länder have approved the Joint Protocol of Results of 30 May 1972 with the decision of 29/30 June 1972.

Bonn, 6 November 1972 B I – 27 007 – 1/72

pp. The Federal Minister of Labour and Social Affairs
Dr. Haase

CEDEFOP – European Centre for the Development of Vocational Training

Vocational training in the Federal Republic of Germany
Prof. Dr Joachim Münch

Luxembourg: Office for Official Publications of the European Communities
Third edition

1991 — V, 229 pp. — 21.0 × 29.7 cm

ISBN 92-826-2502-8

Catalogue number: HX-59-90-233-EN-C

Price (excluding VAT) in Luxembourg: ECU 8

Venta y suscripciones • Salg og abonnement • Verkauf und Abonnement • Πωλήσεις και συνδρομές
Sales and subscriptions • Vente et abonnements • Vendita e abbonamenti
Verkoop en abonnementen • Venda e assinaturas

BELGIQUE / BELGIE

Moniteur belge / Belgisch Staatsblad
Rue de Louvain 42 / Leuvenseweg 42
1000 Bruxelles / 1000 Brussel
Tel. (02) 512 00 26
Fax 511 01 84
CCP / Postrekening 000-2005502-27

Autres distributeurs / Overige verkooppunten

Librairie européenne/ Europese Boekhandel
Avenue Albert Jonnart 50 / Albert Jonnartlaan 50
1200 Bruxelles / 1200 Brussel
Tel. (02) 734 02 81
Fax 735 08 60

Jean De Lannoy
Avenue du Roi 202 / Koningslaan 202
1060 Bruxelles / 1060 Brussel
Tel. (02) 538 51 69
Telex 63220 UNBOOK B
Fax (02) 538 08 41

CREDOC
Rue de la Montagne 34 / Bergstraat 34
Bte 11 / Bus 11
1000 Bruxelles / 1000 Brussel

DANMARK

J. H. Schultz Information A/S
EF-Publikationer
Ottiliavej 18
2500 Valby
Tlf. 36 44 22 66
Fax 36 44 01 41
Girokonto 6 00 08 86

BR DEUTSCHLAND

Bundesanzeiger Verlag
Breite Straße
Postfach 10 80 06
5000 Köln 1
Tel. (02 21) 20 29-0
Fernschreiber
ANZEIGER BONN 8 882 595
Fax 20 29 278

GREECE

G.C. Eleftheroudakis SA
International Bookstore
Nikis Street 4
10563 Athens
Tel. (01) 322 63 23
Telex 219410 ELEF
Fax 323 98 21

ESPAÑA

Boletín Oficial del Estado
Trafalgar, 27
28010 Madrid
Tel. (91) 44 82 135

Mundi-Prensa Libros, S.A.
Castelló, 37
28001 Madrid
Tel. (91) 431 33 99 (Libros)
431 32 22 (Suscripciones)
435 36 37 (Dirección)
Telex 49370-MPLI-E
Fax (91) 575 39 98

Sucursal:
Librería Internacional AEDOS
Consejo de Ciento, 391
08009 Barcelona
Tel. (93) 301 86 15
Fax (93) 317 01 41

Llibreria de la Generalitat de Catalunya
Rambla dels Estudis, 118 (Palau Moja)
08002 Barcelona
Tel. (93) 302 68 35
302 64 62
Fax 302 12 99

FRANCE

Journal officiel
Service des publications des Communautés européennes
26, rue Desaix
75727 Paris Cedex 15
Tel. (1) 40 58 75 00
Fax (1) 40 58 75 74

IRELAND

Government Publications Sales Office
Sun Alliance House
Molesworth Street
Dublin 2
Tel. 71 03 09

or by post

Government Stationery Office
EEC Section
6th floor
Bishop Street
Dublin 8
Tel. 78 16 66
Fax 78 06 45

ITALIA

Licosa Spa
Via Benedetto Fortini, 120/10
Casella postale 552
50125 Firenze
Tel. (055) 64 54 15
Fax 64 12 57
Telex 570466 LICOSA I
CCP 343 509

Subagenti:

Libreria scientifica Lucio de Biasio - AEIOU
Via Meravigli, 16
20123 Milano
Tel. (02) 80 76 79

Herder Editrice e Libreria
Piazza Montecitorio, 117-120
00186 Roma
Tel. (06) 679 46 28/679 53 04

Libreria giuridica
Via XII Ottobre, 172/R
16121 Genova
Tel. (010) 59 56 93

GRAND-DUCHÉ DE LUXEMBOURG

Abonnements seulement
Subscriptions only
Nur für Abonnements

Messageries Paul Kraus
11, rue Christophe Plantin
2339 Luxembourg
Tél. 499 88 88
Télex 2515
Fax 499 88 84 44
CCP 49242-63

NEDERLAND

SDU Overheidsinformatie
Externe Fondsen
Postbus 20014
2500 EA 's-Gravenhage
Tel. (070) 37 89 911
Fax (070) 34 75 778

PORTUGAL

Imprensa Nacional
Casa da Moeda, EP
Rua D. Francisco Manuel de Melo, 5
P-1092 Lisboa Codex
Tel. (01) 69 34 14

Distribuidora de Livros Bertrand, Ld.ª
Grupo Bertrand, SA
Rua das Terras dos Vales, 4-A
Apartado 37
P-2700 Amadora Codex
Tel. (01) 49 59 050
Telex 15798 BERDIS
Fax 49 60 255

UNITED KINGDOM

HMSO Books (PC 16)
HMSO Publications Centre
51 Nine Elms Lane
London SW8 5DR
Tel. (071) 873 9090
Fax GP3 873 8463
Telex 29 71 138

Sub-agent:

Alan Armstrong Ltd
2 Arkwright Road
Reading, Berks RG2 0SQ
Tel. (0734) 75 18 55
Telex 849937 AAALTD G
Fax (0734) 75 51 64

ÖSTERREICH

Manz'sche Verlags- und Universitätsbuchhandlung
Kohlmarkt 16
1014 Wien
Tel. (0222) 531 61-0
Telex 11 25 00 BOX A
Fax (0222) 531 61-81

SVERIGE

BTJ
Box 200
22100 Lund
Tel. (046) 18 00 00
Fax (046) 18 01 25

SCHWEIZ / SUISSE / SVIZZERA

OSEC
Stampfenbachstraße 85
8035 Zürich
Tel. (01) 365 51 51
Fax (01) 365 54 11

MAGYARORSZÁG

Agroinform
Központ:
Budapest I., Attila út 93, H-1012

Levélcím:
Budapest, Pf.: 15 H-1253
Tel. 36 (1) 56 82 11
Telex (22) 4717 AGINF H-61

POLAND

Business Foundation
ul. Wspólna 1/3
PL-00-529 Warszawa
Tel. 48 (22) 21 99 93/21 84 20
Fax 48 (22) 28 05 49

YUGOSLAVIA

Privredni Vjesnik
Bulevar Lenjina 171/XIV
11070 - Beograd
Tel. 123 23 40

TÜRKIYE

Pres Dagitim Ticaret ve sanayi A.Ş.
Narlibahçe Sokak No. 15
Cağaloglu
Istanbul
Tel. 512 01 90
Telex 23822 DSVO-TR

AUTRES PAYS
OTHER COUNTRIES
ANDERE LÄNDER

Office des publications officielles des Communautés européennes
2, rue Mercier
L-2985 Luxembourg
Tél. 49 92 81
Telex PUBOF LU 1324 b
Fax 48 85 73
CC bancaire BIL 8-109/6003/700

CANADA

Renouf Publishing Co. Ltd
Mail orders — Head Office:
1294 Algoma Road
Ottawa, Ontario K1B 3W8
Tel. (613) 741 43 33
Fax (613) 741 54 39
Telex 0534783

Ottawa Store:
61 Sparks Street
Tel. (613) 238 89 85

Toronto Store:
211 Yonge Street
Tel. (416) 363 31 71

UNITED STATES OF AMERICA

UNIPUB
4611-F Assembly Drive
Lanham, MD 20706-4391
Tel. Toll Free (800) 274 4888
Fax (301) 459 0056

AUSTRALIA

Hunter Publications
58A Gipps Street
Collingwood
Victoria 3066

JAPAN

Kinokuniya Company Ltd
17-7 Shinjuku 3-Chome
Shinjuku-ku
Tokyo 160-91
Tel. (03) 3439-0121

Journal Department
PO Box 55 Chitose
Tokyo 156
Tel. (03) 3439-0124

European Centre for the Development of Vocational Training,
Jean Monnet House, Bundesallee 22, **D-1000 Berlin 15**
Tel.: (030) 88 41 20, Telex: 184 163 eucen d, Telefax: 88 41 22 22

CEDEFOP

04 05 16

HX-59-90-233-EN-C

ISBN 92-826-2502-8

Price (excluding VAT) in Luxembourg: ECU 8

OFFICE FOR OFFICIAL PUBLICATIONS
OF THE EUROPEAN COMMUNITIES
L-2985 Luxembourg